

Calculate with Confidence.



**eDose**<sup>®</sup>

Drug Dosage Calculation Software  
Authentic Diagnostic Assessment  
User Guide



## Statement on Cognitive Competence Development

Where the terms 'competence' or 'competency' are used within eDose and its associated documentation including user guides, sales and marketing materials and website content, we refer explicitly to *Cognitive Competence* as defined by the European Parliament (2008)<sup>1</sup> in its recommendations on the establishment of a European Qualifications Framework for Lifelong Learning. In this sense, *Cognitive Competence* relates only to the development and assessment of knowledge of the medication dosage calculation problem solving process and excludes any other forms of competence such as *functional, personal* or *ethical* competence that will be required for safe medication practice in a clinical setting.

<sup>1</sup>European Parliament (2008) Glossary: RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning. [online] EUCEN. Available from: [www.eucen.org/EQFpro/GeneralDocs/FilesFeb09/GLOSSARY.pdf](http://www.eucen.org/EQFpro/GeneralDocs/FilesFeb09/GLOSSARY.pdf) [Accessed 28 September 2009]



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# Before You Start

eDose<sup>®</sup> provides a range of tools and features designed to optimize your learning experience.

The eDose software program is a web-hosted application and therefore accessible from any computer with an Internet connection. We recommend that you consider the following before you begin.

## Save Your Results

Always exit the Authentic Diagnostic Assessment program using the **Log Out** button so your results may be saved. Any other method of quitting the program causes your results and your progress to be lost.

## Use Pencil and Paper When Appropriate

At various times in the program, you will be encouraged to make a calculation using pencil and paper before attempting to enter values directly into the computer. In addition, you may want to write down your own notes as you work your way through the program.

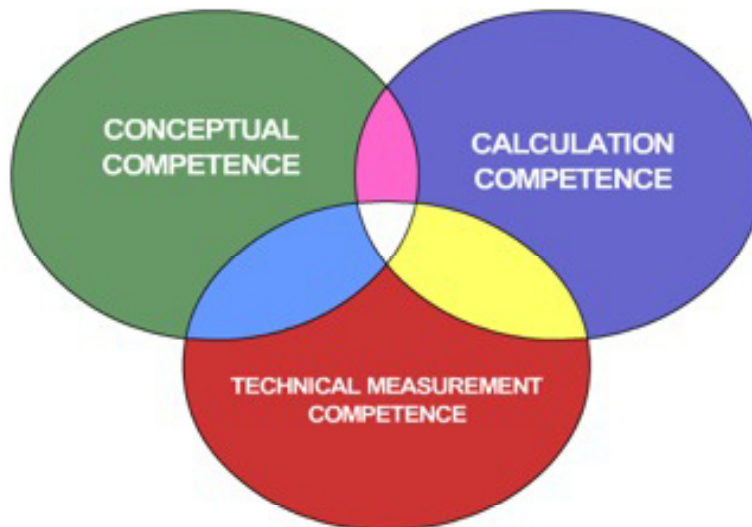
## Consult the Getting Started Guide

Should you have trouble logging in or navigating through the Authentic Diagnostic Assessment (ADA) program, consult the Getting Started Guide accessible through the **Help** menu.

# The eDose Cognitive Competence Model

eDose facilitates the learning, and authentic diagnostic assessment, of the cognitive competencies that establish the critical foundations of patient care knowledge within the domain of medication dosage problem solving.

Cognitive competence in medication dosage problem solving consists of three inter-related elements as illustrated in the figure below:

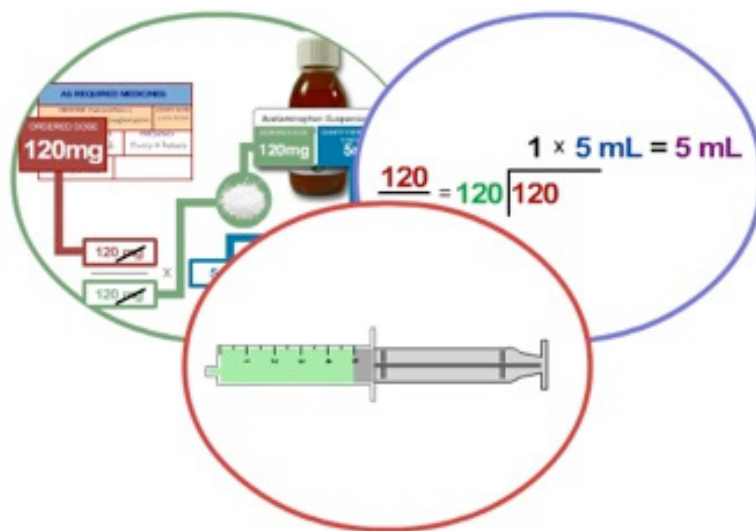


*Figure 1: The eDose Cognitive Competence Model*

- **Conceptual Competence:** which involves correctly interpreting a medication dosage calculation problem and accurately setting up a dosage equation.
- **Calculation Competence:** which involves correctly calculating an accurate numerical value for the dose or rate to be administered.
- **Technical Measurement Competence:** which involves selecting an appropriate measurement vehicle and accurately measuring the dose or rate to be administered.

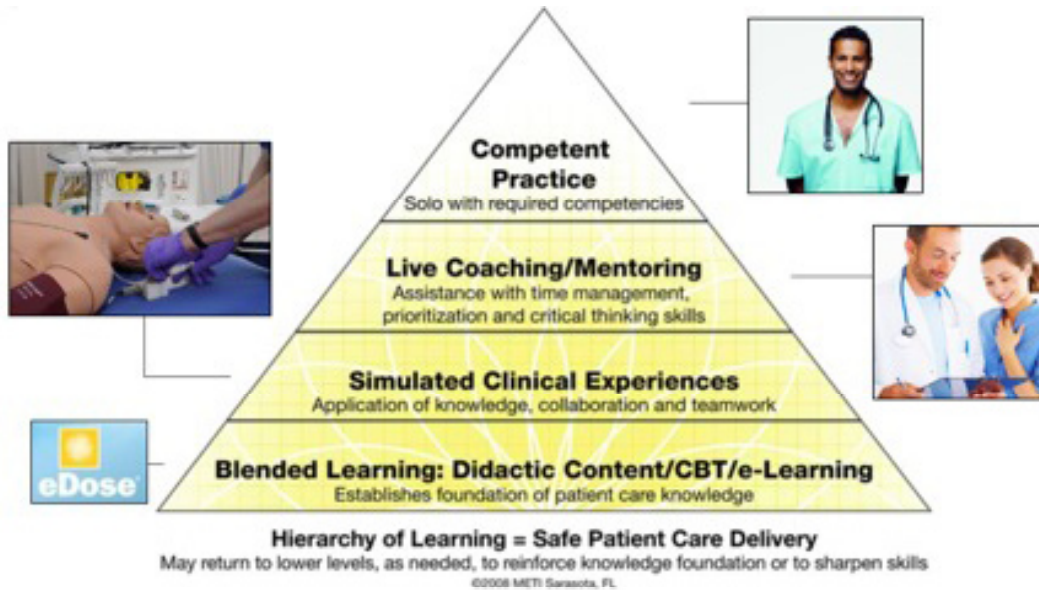
The figure below demonstrates an example of the three competence elements of a liquid medicines dosage problem, which shows:

- **Conceptual Competence:** the extraction of essential numerical information and measurement units from medication orders and labels and the principles of dimensional analysis.
- **Calculation Competence:** the calculation of an appropriate numerical value for the dose to be administered.
- **Technical Measurement Competence:** the technical measurement of the dose to be administered in an appropriate measurement vehicle.



*Figure 2: The Three Competence Elements of a Liquid Medicines Dosage Problem*

The figure below shows how the eDose cognitive competence model locates within the base layer of the METI Hierarchy for Learning.



**Figure 3: The METI Hierarchy for Learning**

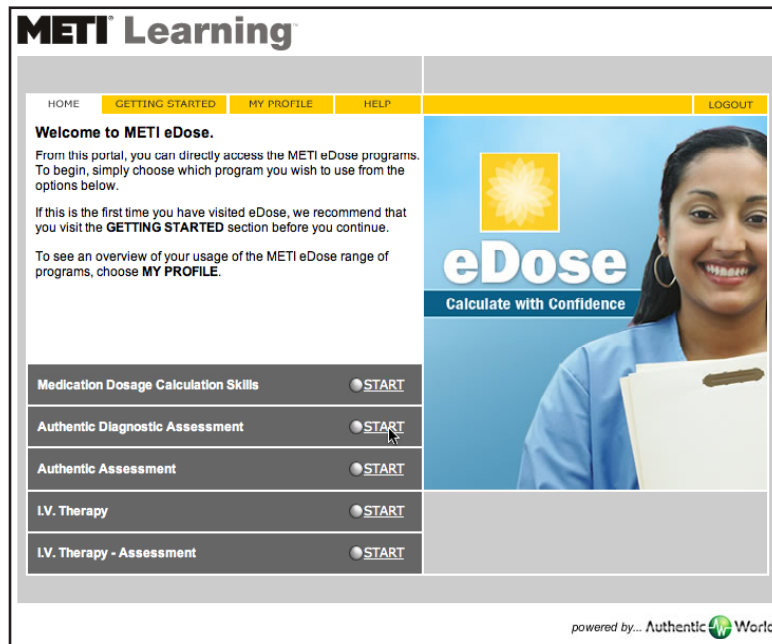
eDose is designed to support the learning, synthesis and diagnostic measurement of cognitive competence in the critical elements of medication dosage problem solving that underpin the application of further competence development and evaluation within each of the remaining levels of the METI Hierarchy for Learning.

- Competence evaluation during simulated clinical experiences and engagement with human patient simulators.
- Competence evaluation in clinical practice settings under the supervision of an experienced mentor.
- Competence achievement consistent with independent practice.

# Authentic Diagnostic Assessment

The Authentic Diagnostic Assessment (ADA) program is launched via the eDose Home page.

Locate the Authentic Diagnostic Assessment module listed on the Home page, and click on the **START** link.



**Figure 4: Selecting Authentic Diagnostic Assessment on the eDose Home Page**

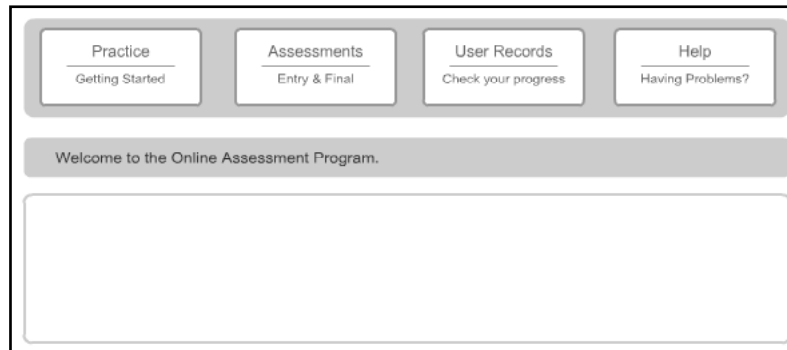
When you launch ADA, a new window of your web browser appears.

To optimize your learning experience within ADA, we recommend you view it using the Full Screen mode of your browser. If using Internet Explorer or the Firefox browser on a PC, enter Full Screen mode by pressing the F11 function key on your keyboard (pressing F11 a second time will return you to the usual windowed mode of operation). For other web browsers, please check the help file associated with the program if you are not familiar with using the Full Screen mode.

The ADA program may also be launched using the link on the My Profile page.

## The ADA Main Menu

The ADA Main Menu provides access to all areas of the system.



**Figure 5: The ADA Main Menu**

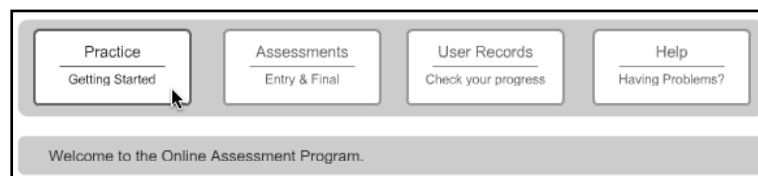
There are four options available on the Main Menu:

- **Practice** - take as many practice assessments as you like
- **Assessments** - take a pre-test or final assessment at a date and time determined by your instructor
- **User Records** - find detailed records of your progress and diagnostic feedback on your performance
- **Help** - obtain online help for using various aspects of the system

A **Log Out** button appears on this screen and remains available for when you choose to exit the system. You should always exit the system using the **Log Out** button to ensure your progress and performance data are saved.

### Practice

Select the **Practice** option to take a practice assessment.

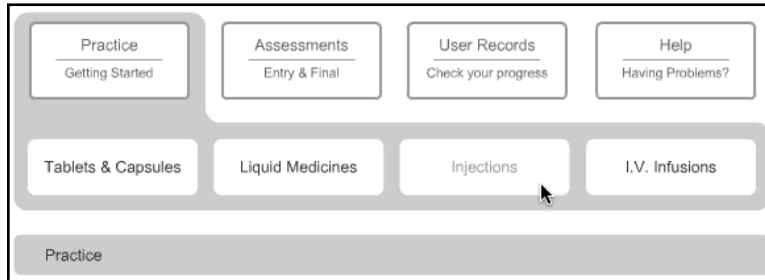


**Figure 6: Selecting the Practice Option**

From the Practice screen, four actions buttons appear for each of the four medication domains:

- Tablets & Capsules
- Liquid Medicines
- Injections
- IV Infusions

You may select any of the medication domains to take a practice ten (10) question assessment. Click on the button for the desired domain.



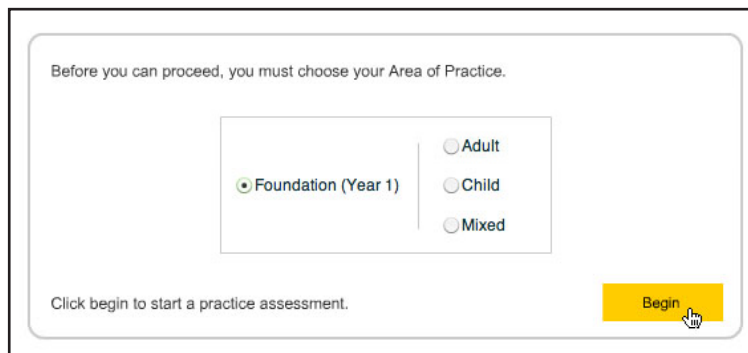
**Figure 7: Selecting a Medication Domain to Practice**

A dialog appears requesting that you identify your **Area of Practice**.

You should choose:

- Adult** - if your studies focus on adult patients
- Child** - if your studies focus on pediatric patients
- Mixed** - if your studies involve both adult and pediatric patients (though primarily adult)
- Foundation** - if you have yet to determine a focus for your studies

The **Foundation** option is selected by default.



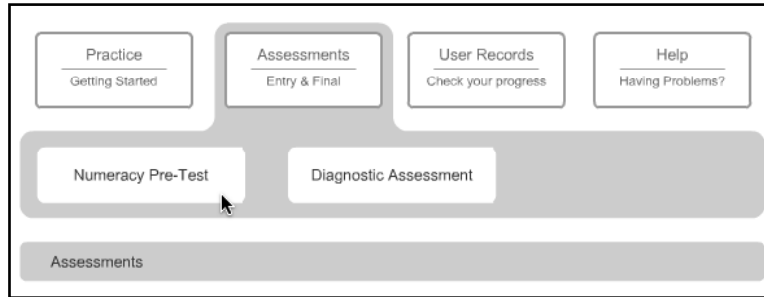
**Figure 8: Choosing an Area of Practice**

This selection is used to tailor the final assessments to the chosen **Area of Practice**.

After selecting the appropriate **Area of Practice**, click on the **Begin** button to start the practice assessment.

## Assessments

Selecting the **Assessments** option provides you with an opportunity to take a Numeracy Pre-Test or a Diagnostic Assessment.

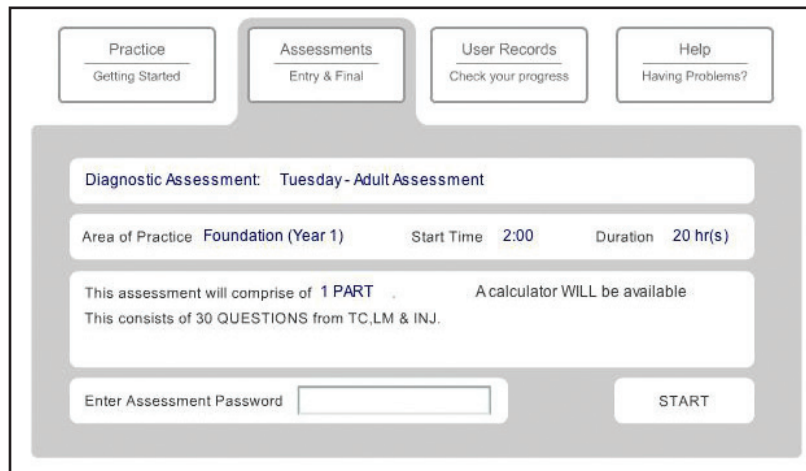


**Figure 9: Options for Assessments**

These options are available **ONLY** if an assessment has been scheduled by the system administrator.

Typically, you will be told of the date, start time and duration of any assessment. The assessment becomes available **ONLY** at the date/time indicated and becomes unavailable again once the set duration has elapsed.

Once you select a type of assessment, the name of and details regarding the assessment appear on the screen as well as a password box.



**Figure 10: Assessment Details**



In addition to the name of the assessment, the Assessments screen includes information on:

- The selected **Area of Practice**
- The assigned start time
- The duration allotted to the assessment
- The number of parts the assessment comprises (typically one or two parts)
- The number of questions to be answered and abbreviations for their medication domains (e.g. TC for tablets and capsules, LM for Liquid Medicines, INJ for Injections and IV for Intravenous Infusions)
- Whether an on-screen calculator will be available

You are required to enter an **Assessment Password** in the field at the bottom before you can begin. This is typically provided to you by your course tutor, clinical manager or administrator just prior to the assessment.

Once the password is entered, click the **START** button to begin.

## Taking a Numeracy Pre-Test

The Numeracy Pre-Test is a tool that instructors can use to evaluate your basic numeracy skills. A Numeracy Pre-Test can only be taken ONCE. Throughout the pre-test, you are provided a bar with the question numbers that displays your progress. The assessment consists of basic calculation questions, divided into five sections: **Division**, **Multiplication**, **Conversion of Fractions to Decimals**, **Multiple Computations** and **Conversion of S.I. Units**.

### Numeracy Pre-Test Questions

The Numeracy Pre-Test questions are multiple-choice calculation problems. Choose the correct answer to the problem from the choices presented or choose **Don't Know**, then click the **NEXT** button.

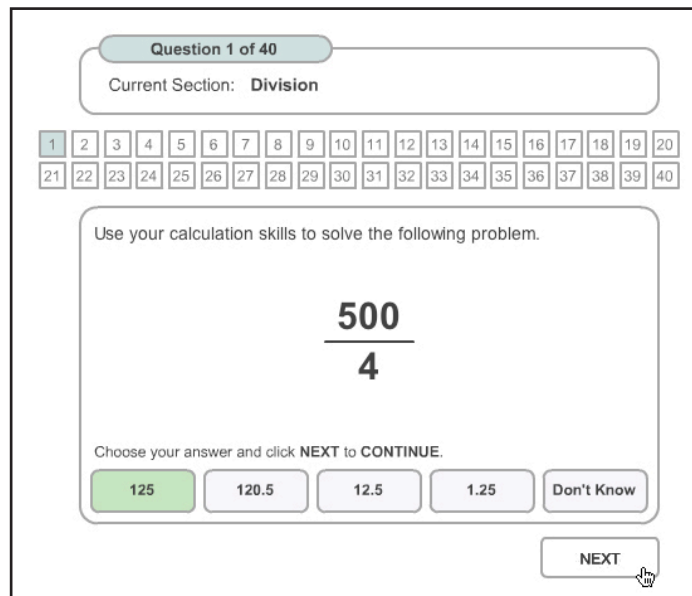
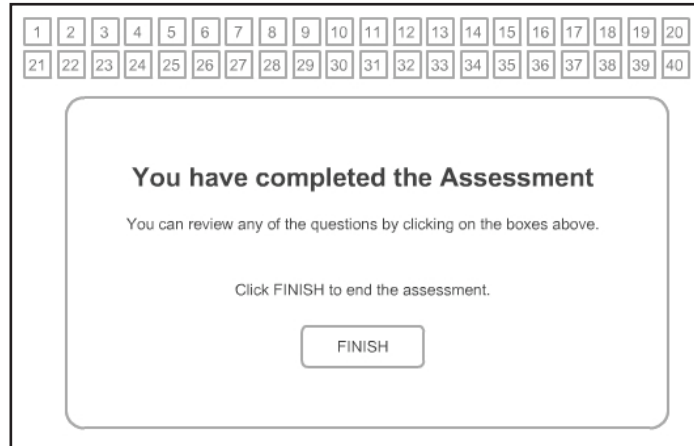


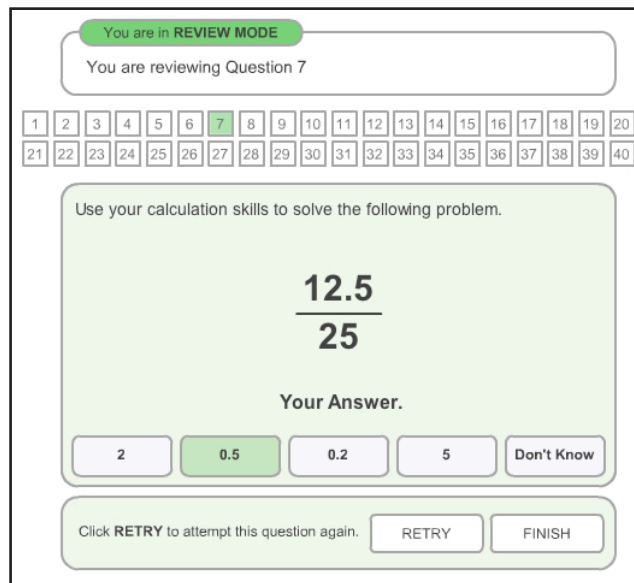
Figure 11: A Numeracy Pre-Test Question

When all questions have been answered, you will be told the exercise is complete and offered the opportunity to review any questions before finishing the assessment. This provides an opportunity to check your answers or to retry any question.



**Figure 12: The Numeracy Pre-Test Completion Screen**

Click on the small box that represents the question number to enter review mode. The Question reappears in **REVIEW MODE**.



**Figure 13: Reviewing a Numeracy Pre-Test Question**

If you wish to change your answer, click the **RETRY** button to clear the existing answer and to start again.

If you are satisfied with the answer, click the **FINISH** button to return to the Numeracy Pre-Test Completion screen.

## Taking an Assessment

Assessments can only be taken ONCE. Typically, students are given a specified amount of time to complete the assessment by their instructors. Throughout the assessment, you are provided a bar with the question numbers that displays your progress.

### Using the On-Screen Calculator

An on-screen calculator may be available for some questions if the instructor chooses to make the calculator accessible.

When a calculator is available, a **Calculator** button appears in the upper right corner of the question.

Click the **Calculator** button to open the on-screen calculator.

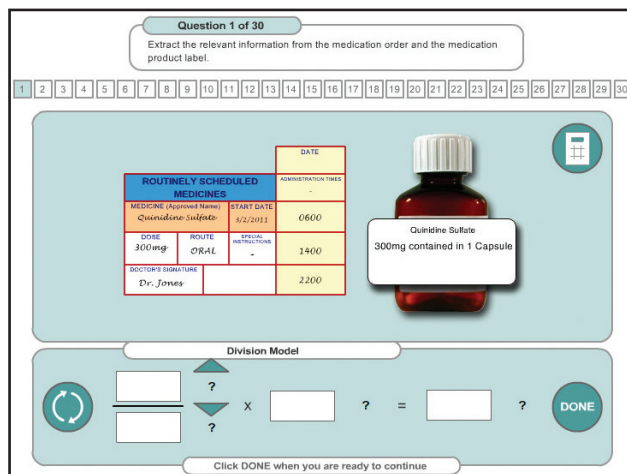


Figure 14: The Calculator Button

The calculator appears.

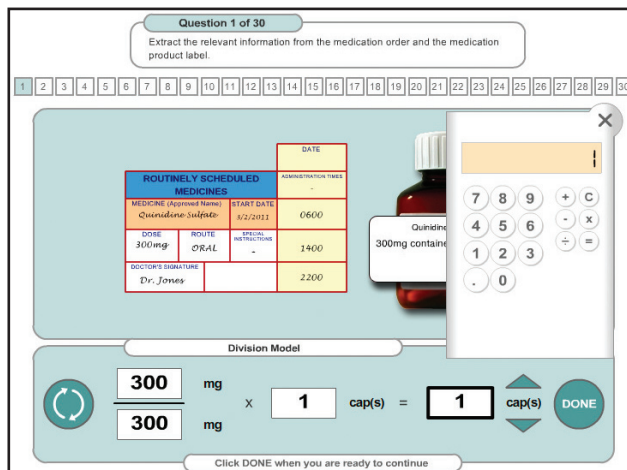
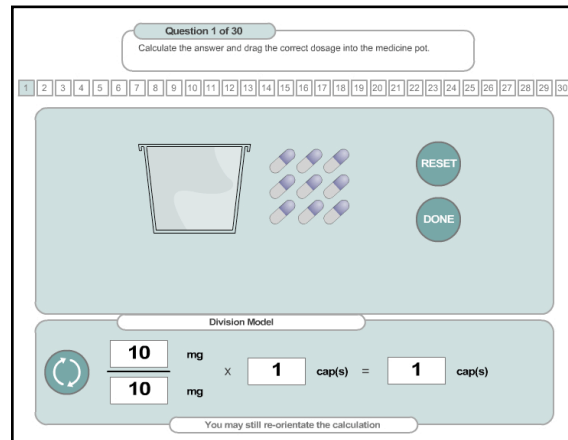


Figure 15: The Calculator

To use the calculator, click the number and operator buttons.



The second step appears.



**Figure 17: The Second Step of a Typical Tablets & Capsules Question**

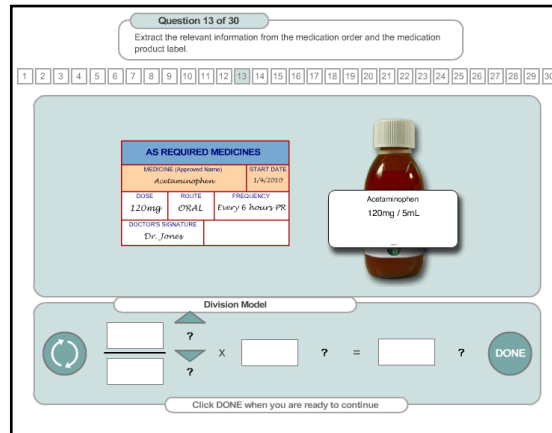
The second step of a typical Tablets and Capsules question requires you to represent your answer by clicking on and dragging the correct number of tablets/capsules required into the medicine cup.

If you make a mistake (e.g. you drag in too many tablets), click the **Reset** button to move the tablets back out of the medicine cup and try again.

When you are happy with your answer, click the **Done** button to proceed to the next question.

## Liquid Medicine Questions

Liquid Medicine questions are presented in three steps.

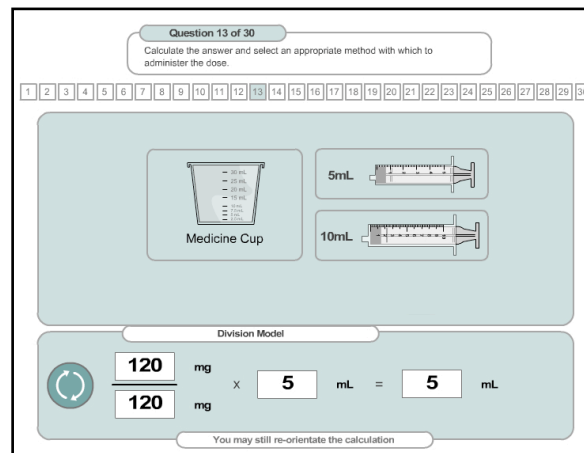


**Figure 18: The First Step of a Typical Liquid Medicine Question**

In the first step you are prompted to extract the relevant information from the medication order and medication product label and calculate the correct dose. This information is inserted by clicking on each box and entering in the values and using the arrows next to each box to choose the correct unit of measure.

When ready, click the **DONE** button.

The second step appears.

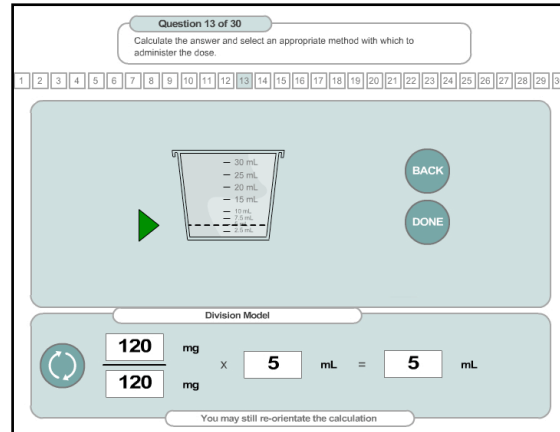


**Figure 19: The Second Step of a Typical Liquid Medicine Question**

The second step of a typical Liquid Medicine question requires you to select an appropriate method/ vehicle with which to administer the dose. You have the choice of selecting a medicine cup or one of two syringes.

Click on the method of choice to continue to the next step.

The third and final step of a typical liquid medicine question requires you to represent your answer as a volume of liquid in the chosen administration vehicle.



**Figure 20: The Third Step of a Typical Liquid Medicine Question**

In the example above, the liquid medicine cup was chosen (see the section below on injections for an example of representing the answer using a syringe). To represent your answer as a volume of liquid, click on and drag the green arrow to the required level on the medicine cup. Release the mouse button and the chosen volume appears as a value in the box to the right of the medicine cup.

When you are satisfied with your answer click the **Done** button.

The medicine cup "fills" to the chosen volume before the screen changes to display the next question.



## Injection Questions

Injection questions are presented in three steps.

DATE	MEDICINE (Approved Name)	DOSE	ROUTE	TIME TO BE GIVEN	DOCT SIGNATURE
1/3/2010	Lidocaine	60mg	I.V.	Lidocaine 20mg in 1mL	

**Figure 21: The First Step of a Typical Injection Question**

In the first step you are prompted to extract the relevant information from the medication order and medication product label and calculate the correct dose. This information is inserted by clicking on each box and entering in the values and using the arrows next to each box to choose the correct unit of measure.

When ready, click the **DONE** button.

The second step appears.

60 mg x 1 mL = 3 mL

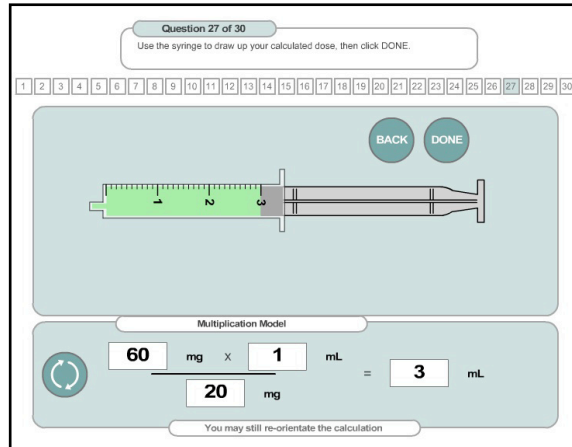
20 mg

**Figure 22: The Second Step of a Typical Injection Question**

The second step of a typical injections question requires you to select an appropriately-sized syringe with which to administer the dose. You have the choice of selecting one of five syringes.

Click on the syringe of choice to continue to the next step.

The third and final step of an Injection question requires you to represent your answer as a volume of liquid in your chosen syringe.



**Figure 23: The Third Step of a Typical Injection Question**

Click on and drag the syringe plunger to the right until the desired volume of liquid is drawn into the syringe.

When you are satisfied with your answer, click the **Done** button to proceed to the next question.

## Intravenous Infusion Questions

Solving an Intravenous Infusion (IV) assessment question involves a two-stage process.

In stage one, you are required to determine the hourly rate and to enter this along with the total infusion volume on a volumetric infusion pump.

In the second stage, a volumetric pump is assumed to be unavailable, and you should calculate the drops per minute required if you were to deliver this fluid via the given IV administration set.

Both stages have multiple steps.

In the first step of stage one, you are prompted to extract the relevant information from the medication order and medication product label and calculate the hourly infusion rate. This information is inserted by clicking on each box and entering in the values and using the arrows next to each box to choose the correct unit of measure.

Question 2 of 10      STAGE 1

Extract the relevant information from the medication order and the medication product label.

1 2 3 4 5 6 7 8 9 10

INFUSION FLUID			INFUSION DURATION	MEDICINE ADDED		DR'S SIGNATURE
TYPE/STRENGTH	VOLUME	ROUTE	DURATION	APPROVED NAME	DOSE	SIGNATURE
Packed Red Blood Cells	280 ml	I.V.	3 hours	-	-	Dr. Jones

Authentic World  
Blood Administration Set  
15 drops per ml

280 ml  
Packed Red Blood Cells

280 mL = 93 mL/hr

3 hour(s)

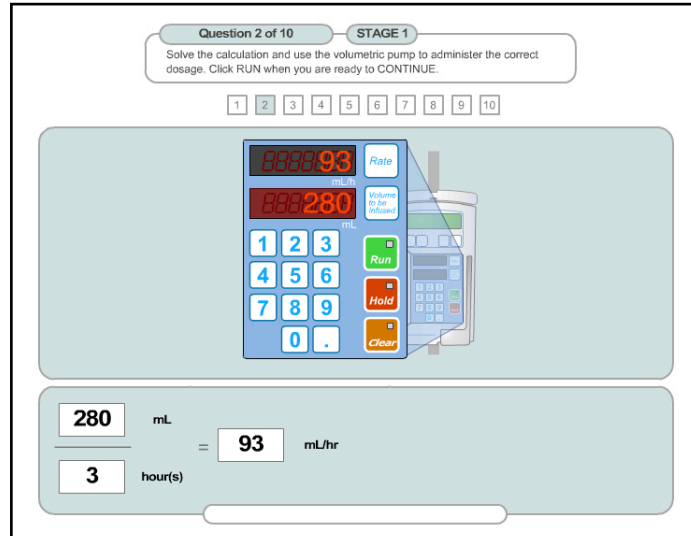
DONE

Click DONE when you are ready to continue

**Figure 24: Calculating the Hourly Rate for Intravenous Infusions**

When ready, click the **DONE** button.

In the second step of stage one, the representation of a volumetric infusion pump appears after the initial equation has been created and accepted.



**Figure 25: Entering the Rate and Volume to Be Infused on a Volumetric Infusion Pump**

Enter the hourly rate value on the pump by clicking the **Rate** button and then clicking the appropriate number keys to represent the answer (93 in the above example).

After entering the rate, enter the total volume to be infused on the pump by clicking the **Volume to be infused** button, and then clicking the appropriate number keys to represent the answer (280 in the above example).

When you are satisfied with your answer, click on the **Run** button to proceed to stage two.

In the first step of stage two, you are required to use the hourly rate determined in the first stage to calculate the number of drops per minute needed if you were to deliver this fluid via an IV administration set.

Question 2 of 10      STAGE 2

Extract the relevant information from the prescription chart and the medication product label.

1 2 3 4 5 6 7 8 9 10

INFUSION FLUID			INFUSION DURATION	MEDICINE ADDED		DR'S SIGNATURE
TYPE/STRENGTH	VOLUME	ROUTE	DURATION	APPROVED NAME	DOSE	
Packed Red Blood Cells	280 ml	I.V.	3 hours	-	-	Dr. Jones

Authentic World Blood Administration Set  
15 drops per ml

280 ml  
Packed Red Blood Cells

DONE

280 mL = 93 mL/hr = 23 drops/min

3 hour(s)      4 D.R.D.

Click DONE when you are ready to continue

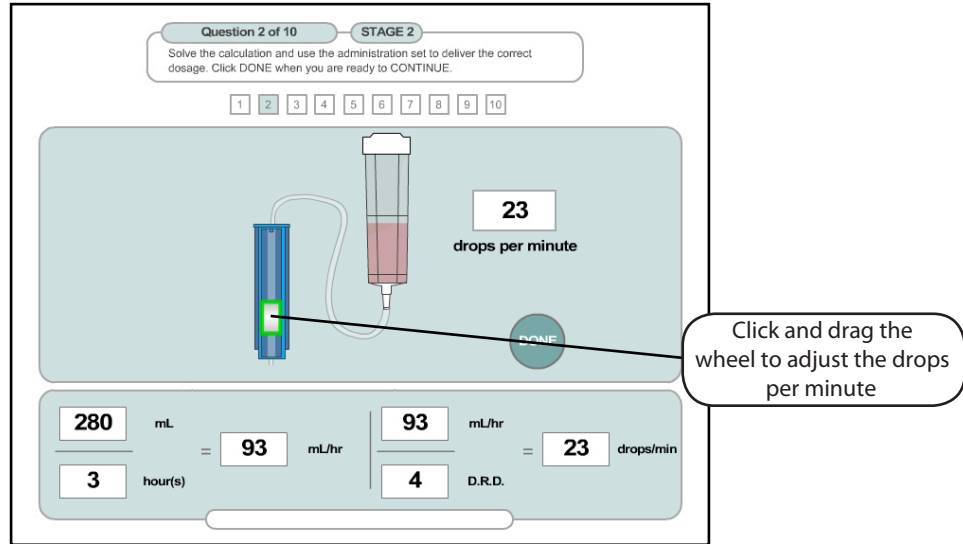
**Figure 26: The First Step of Stage Two of a Typical Intravenous Infusion Question**

You now have to set up a calculation based on the hourly rate and the drop rate denominator (DRD) appropriate to the number of drops per milliliter the administration set delivers. The drop rate denominator is determined by dividing 60 minutes by the number of drops per milliliter delivered by the administration set (15 in this example).

Enter the values for hourly rate and drop rate denominator, along with the calculated answer, in the appropriate boxes and select the associated units of measurement.

When you are satisfied with your answer, click the **Done** button to proceed to the final step.

In the second step of stage two, you are required to represent your answer as drops per minute by adjusting the administration set accordingly.



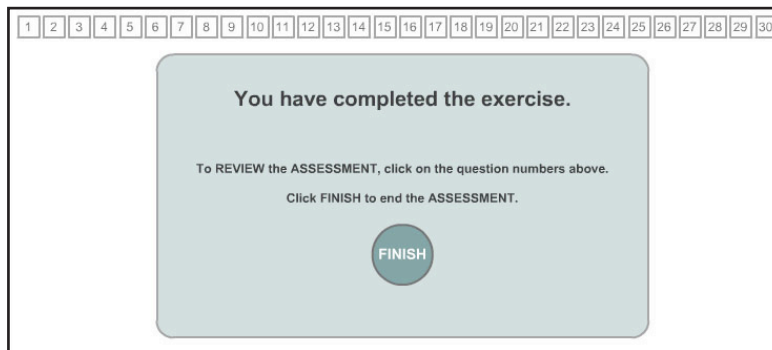
**Figure 27: Representing the Answer with an Administration Set**

Click the “wheel” of the fluid control mechanism on the left and drag the wheel up or down until the desired answer is represented in the **drops per minute** box.

When you are satisfied with the answer, click the **Done** button to proceed to the next question.

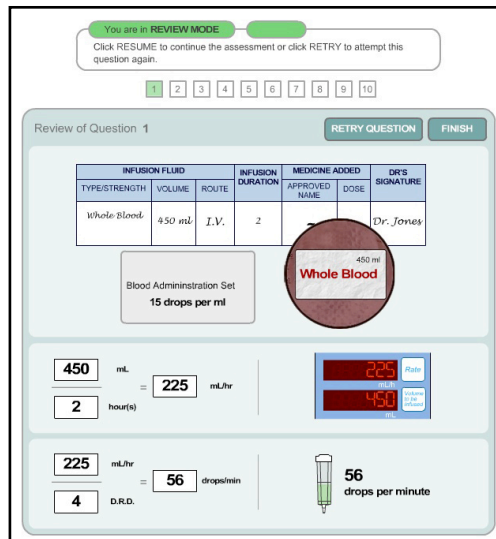
## Completing the Assessment

When all questions have been answered, you will be told the exercise is complete and offered the opportunity to review any questions before finishing the assessment. This provides an opportunity to check your answers or to retry any question.



**Figure 28: The Exercise Completion Screen**

Click on the small box that represents the question number to enter review mode. The Question reappears in **REVIEW MODE**.



**Figure 29: Reviewing an Assessment Question**

Your solution to the problem reappears with the question.

If you wish to change this answer, click the **RETRY QUESTION** button to clear the existing answer and to start again.

If you are satisfied with the answer, click the **FINISH** button to return to the Exercise Completion screen.

## User Records

Selecting the User Records option from the Main Menu opens your Personal Record.

The screenshot shows the 'Personal Record' page with the following content:

- Navigation Tabs:** PROFILE (selected), TABS & CAPS, LIQUID MED., INJECTIONS, I.V., ASSESSMENTS
- Personal Record Section:**
  - User Name: [auth09a101] Matt Brown
  - Institution: Authentic World Ltd.
  - You first used this program on: 07/10/2009
  - You have accessed the program: 43 times.
  - You last used this program on: 01/14/2010
  - Total time spent in the program: 6.67 hours.
- Final Assessments Section:**
  - Click the ASSESSMENTS tab for full ASSESSMENT FEEDBACK.
- Practice Summary Section:**
  - Tablets & Capsules:** Last Attempted: 07/01/09, No. of Attempts: 3, Last Score: 0 out of 20
  - Liquid Medicines:** Last Attempted: 10/20/09, No. of Attempts: 1, Last Score: 3 out of 20
  - Injections:** Last Attempted: 10/19/09, No. of Attempts: 1, Last Score: 26 out of 20
  - I.V. Infusions:** Last Attempted: 11/04/09, No. of Attempts: 1, Last Score: 35 out of 40

*Figure 30: The ADA Personal Record*

Your Personal Record contains all of the information relating to your use, progress and performance within the system.

The Personal Record page has six panels: **PROFILE**, **TABS & CAPS**, **LIQUID MED.**, **INJECTIONS**, **I.V.** and **ASSESSMENTS**.

### Profile

The **PROFILE** panel provides the following information about you and your interaction with the program.

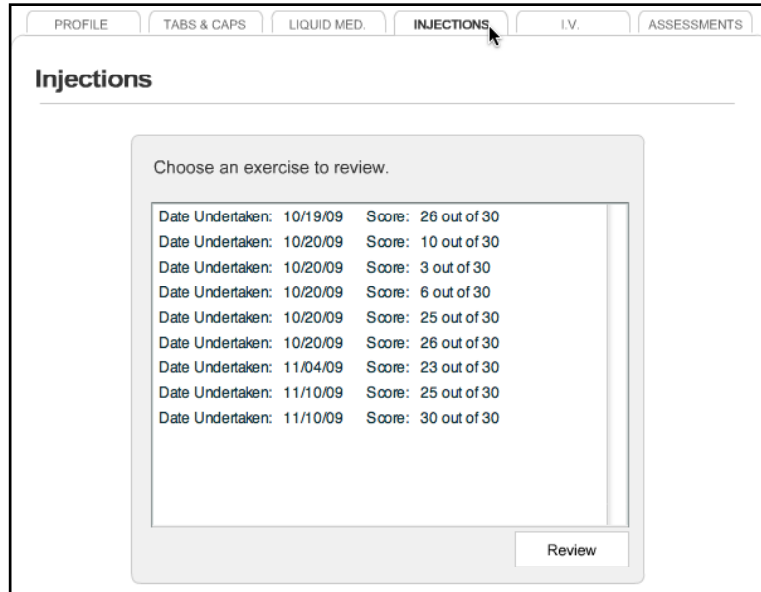
- Your **User Name** and **Institution**
- The date you first and last used the program
- The number of times you have logged in and the time spent in the program
- An overview of your performance history that shows the number of attempts, date and last score for the practice diagnostic assessments taken for **Tablets & Capsules**, **Liquid Medicines**, **Injections** and **IV Infusions** sections of the program.



## Practice Assessment Summaries

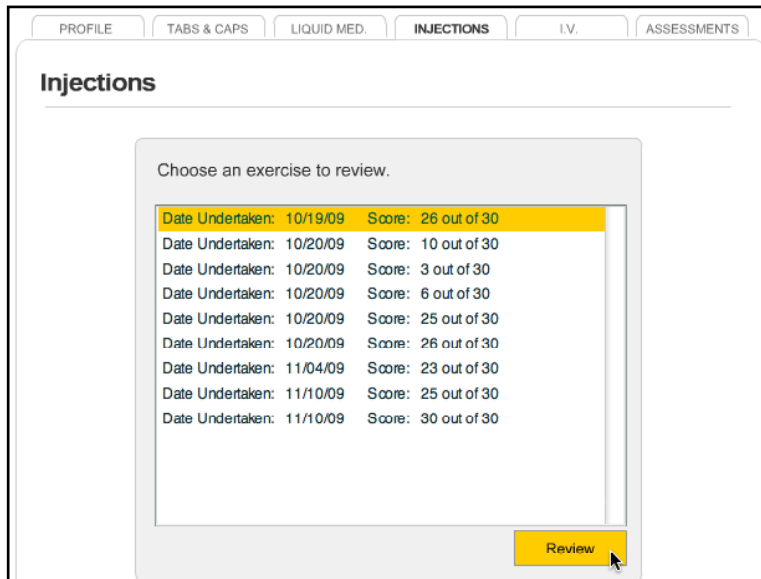
Four of the tabs, **TABS & CAPS**, **LIQUID MED.**, **INJECTIONS** and **I.V.**, offer more detailed information about your performance in each of the four medication domains included in the program.

Clicking on a tab reveals a list of the exercises taken in that domain. Each exercise is shown with the date undertaken and the score achieved.



**Figure 31: Selecting a Medication Domain to Review**

You can review any exercise by selecting it in the list box as in the above example and clicking on the **Review** button.



**Figure 32: Selecting an Exercise to Review**

A summary of the selected exercise appears.

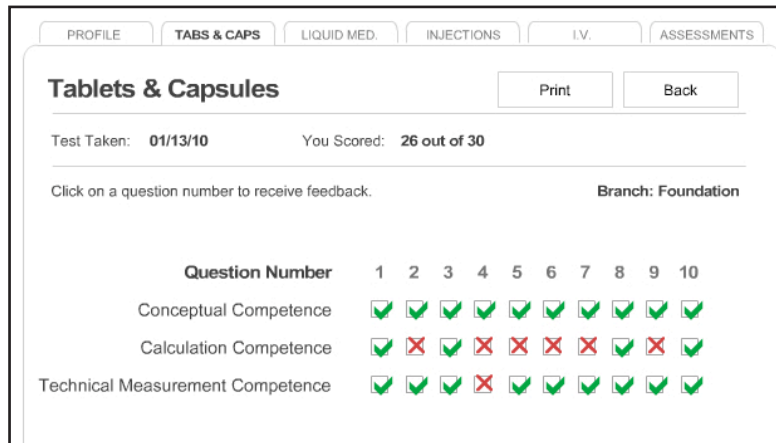


Figure 33: Reviewing an Exercise

Each question can receive a total score of three points: one point for correct setup of the problem (Conceptual Competence), one point for calculation of the correct answer (Calculation Competence) and one point for the correct technical measurement of the medication (Technical Measurement Competence). Therefore, the maximum score for 10 questions is 30 points.

In the example above, all the questions are shown as set up correctly. This is signified by the check marks beneath the question numbers in the **Conceptual Competence** row. Six questions (2, 4, 5, 6, 7 and 9) were calculated incorrectly, signified by the **X** located in the box beneath their number in the **Calculation Competence** row. Question 4 shows an incorrect measurement of medication was made, signified by the **X** corresponding to its number in the **Technical Measurement Competence** row. From this summary you can see that only four questions were answered entirely correctly – questions 1, 3, 8 and 9 – none of which show an **X** beneath the associated question number.

For more detailed feedback on any of the questions, click the appropriate checkmark or **X**.

A screen providing details and feedback pertaining to the question and answer appears.

The screenshot displays the 'Tablets & Capsules' section of the eDose application. At the top, navigation tabs include PROFILE, TABS & CAPS, LIQUID MED., INJECTIONS, I.V., and ASSESSMENTS. The current test is dated 01/13/10, and the user has scored 26 out of 30. A 'Back' button is visible. The question is identified as 'Question 4' from the 'Foundation' branch. A feedback message states: 'One or more elements of the calculation are incorrect. See below for details.'

The question details include a 'DOSE 10mg' and a 'Famotidine 20mg in 1 Tablet'. The 'Correct Answer' is shown as a calculation:  $\frac{10 \text{ mg}}{20 \text{ mg}} \times 1 \text{ tab(s)} = 0.5 \text{ tab(s)}$ . The 'Your Answer' section shows the user's calculation:  $\frac{10 \text{ mg}}{20 \text{ mg}} \times 1 \text{ tab(s)} = 1 \text{ tab(s)}$ . A red box highlights the user's answer of 1 tablet, and a large red 'X' is placed over the bottom portion of the answer area, indicating it is incorrect.

**Figure 34: The Review of a Question and its Answer**

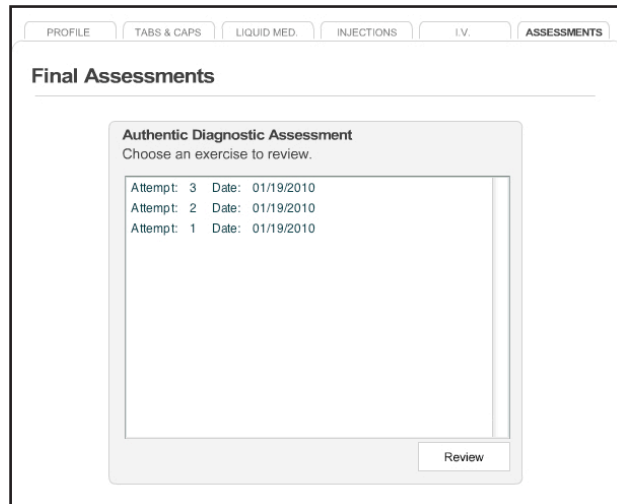
There are three main components to the feedback for the question that appear in portions of the screen.

- The leftmost portion of the screen represents the key elements of the problem (i.e. the ordered dose and the medication container label showing the dispensed dose and quantity/volume in which the dispensed dose is contained).
- The center portion of the screen at the top shows the **Correct Answer** to the problem. This shows the problem setup, calculation and technical measurement components of the solution.
- The lower center portion of the screen show **Your Answer** to the problem. Where a mistake has been made, a large **X** appears and the component(s) of the incorrect answer is/are circled.

In the above example the user has set the problem up correctly but has made a calculation error (i.e. providing a numeric answer of 1 tab). The user has also made a technical measurement error by administering an incorrect amount of medication.

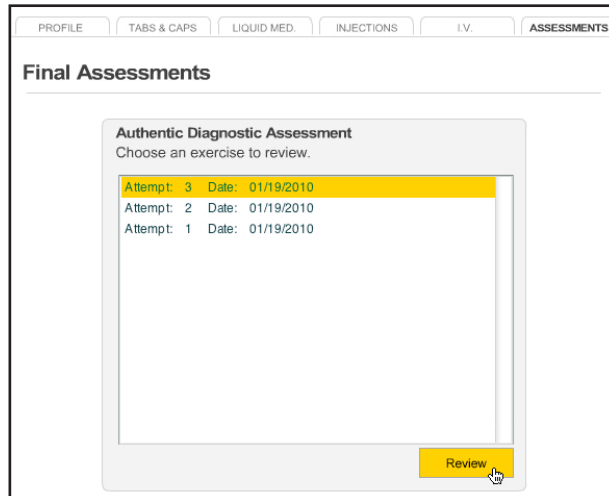
## Assessments

The **Assessments** tab of the Personal Record provides access to your performance records in any of the scheduled Final Assessments you have taken.



**Figure 35: The Final Assessments Panel**

You can review an assessment by selecting it in the list box and clicking on the **Review** button.



**Figure 36: Selecting a Final Assessment to Review**

A list of all the questions and scores of the selected assessment appears.

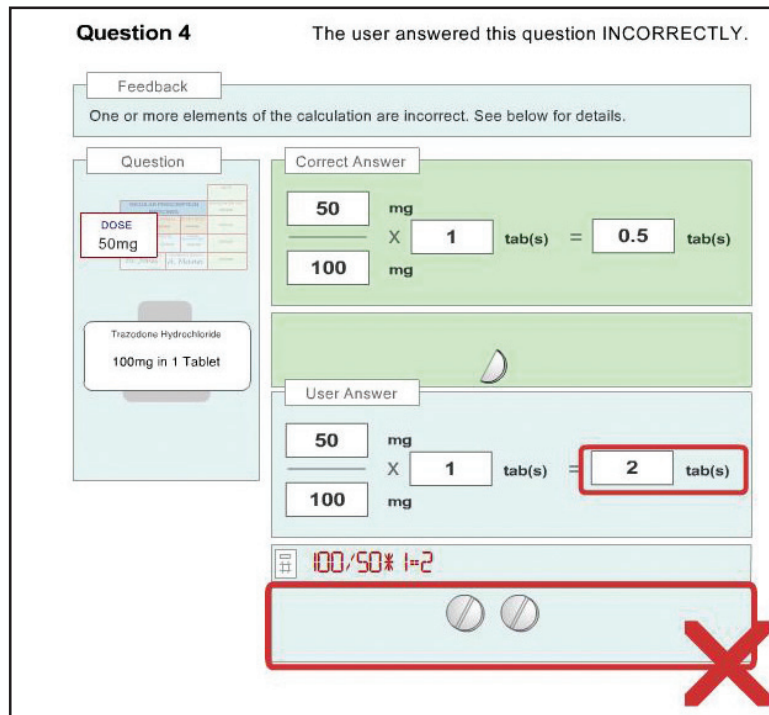
PROFILE		TABS & CAPS		LIQUID MED.		INJECTIONS		IV.		ASSESSMENTS	
<b>Final Assessments</b>										Print	Back
Test Taken:		01/13/10		You Scored:		144 out of 150		Attempt No.:		2	
Click on a question number to receive feedback.										Area of Practice: Foundation (Year 1)	
TABLETS & CAPSULES	Question Number	1	2	3	4	5	6	7	8	9	10
	Conceptual	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Calculation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Technical	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LIQUID MEDICINES	Question Number	11	12	13	14	15	16	17	18	19	20
	Conceptual	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Calculation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Technical	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
INJECTIONS	Question Number	21	22	23	24	25	26	27	28	29	30
	Conceptual	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Calculation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Technical	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IV INFUSIONS	Question Number	31	32	33	34	35	36	37	38	39	40
	Conceptual	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓
	Calculation	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓
	Technical	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓
	Conceptual	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓
	Calculation	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓
	Technical	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓
	Technical	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓

Figure 37: Reviewing a Final Assessment

The questions are grouped according to medication type (i.e. **Tablets & Capsules**, **Liquid Medicines**, **Injections** and **IV Infusions**).

For more detailed feedback on any of the questions, click the appropriate checkmark or **X**. A summary of the selected exercise appears.

A screen providing details pertaining to the question and answer appears.



**Figure 24: Reviewing a Question and Answer**

There are three main components to question feedback.

- The topmost portion of the screen represents the key elements of the problem (the ordered dose and the medication label).
- The center portion of the screen shows the **Correct Answer** to the problem, including problem setup, calculations and technical measurements.
- The lower portion of the screen shows **Your Answer** to the problem. Where a mistake has been made, a large **X** appears and the incorrect components of the answer are circled in red. If the on-screen calculator was used to compute the answer, the calculator keystrokes are also shown.

In the above example, the user set the problem up correctly but made a calculation error. The calculator keystrokes indicate that the user entered the numeric values for ordered and dispensed dose incorrectly, resulting in an incorrect answer and administration of the wrong amount of medication.

To obtain a printed summary of your performance for the assessment click on the **Print** button near the top of the page. A cover page summarizing the assessment prints.

<b>METI</b>		USER [auth09a101] Matt Brown									DATE 06/19/09		<b>eDose</b>		
Medication Domain															
Foundation (Year 1)	TC			LM			INJ			I.V. Infusions Domain					
Complexity	SETUP	CALC	TECH	SETUP	CALC	TECH	SETUP	CALC	TECH		SETUP	CALC	TECH		
Unit Dose	3	3	3	3	3	3	3	3	3	27	mL/hr	9	9	9	27
Unit & Multiple Dose	7	7	7	7	7	7	7	7	7	63	drop/min	9	9	9	27
	10	10	10	10	10	10	10	10	10	90		18	18	18	54
Total Score														144	

Figure 38: The Print Cover

The cover page is followed by a summary of each of the assessment sections.

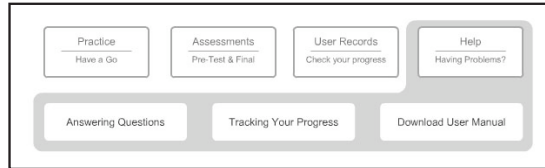
Username		[auth09a101] Matt Brown		<b>METI</b>			
Section		Tablets & Capsules		<b>eDose</b>			
Date		01/13/10					
		Correct Answer		Your Answer			
UNIT DOSE	1	$\frac{10 \text{ mg}}{10 \text{ mg}} \times 1 \text{ cap(s)} = 1 \text{ cap(s)}$	Problem Setup $\frac{10 \text{ mg}}{10 \text{ mg}} \times 1 \text{ cap(s)}$	Calculation ✓ 1 cap(s)	Technical ✓	3	
	2	$\frac{35 \text{ mg}}{35 \text{ mg}} \times 1 \text{ tab(s)} = 1 \text{ tab(s)}$	Problem Setup $\frac{35 \text{ mg}}{35 \text{ mg}} \times 1 \text{ tab(s)}$	Calculation ✓ 1 tab(s)	Technical ✓	3	
	3	$\frac{10 \text{ mg}}{10 \text{ mg}} \times 1 \text{ tab(s)} = 1 \text{ tab(s)}$	Problem Setup $\frac{10 \text{ mg}}{10 \text{ mg}} \times 1 \text{ tab(s)}$	Calculation ✓ 1 tab(s)	Technical ✓	3	
	4	$\frac{20 \text{ mg}}{10 \text{ mg}} \times 1 \text{ tab(s)} = 2 \text{ tab(s)}$	Problem Setup $\frac{20 \text{ mg}}{10 \text{ mg}} \times 1 \text{ tab(s)}$	Calculation ✓ 2 tab(s)	Technical ✓	3	
	5	$\frac{4 \text{ mg}}{2 \text{ mg}} \times 1 \text{ tab(s)} = 2 \text{ tab(s)}$	Problem Setup $\frac{4 \text{ mg}}{2 \text{ mg}} \times 1 \text{ tab(s)}$	Calculation ✓ 2 tab(s)	Technical ✓	3	
SUB-MULTIPLE UNIT DOSE	6	$\frac{30 \text{ mg}}{10 \text{ mg}} \times 1 \text{ cap(s)} = 3 \text{ cap(s)}$	Problem Setup $\frac{30 \text{ mg}}{10 \text{ mg}} \times 1 \text{ cap(s)}$	Calculation ✓ 3 cap(s)	Technical ✓	3	
	7	$\frac{1 \text{ mg}}{2 \text{ mg}} \times 1 \text{ tab(s)} = 0.5 \text{ tab(s)}$	Problem Setup $\frac{1 \text{ mg}}{2 \text{ mg}} \times 1 \text{ tab(s)}$	Calculation ✓ 0.5 tab(s)	Technical ✓	3	
	8	$100 \text{ mg} \times \frac{1 \text{ tab(s)}}{50 \text{ mg}} = 2 \text{ tab(s)}$	Problem Setup $100 \text{ mg} \times \frac{1 \text{ tab(s)}}{50 \text{ mg}}$	Calculation ✓ 2 tab(s)	Technical ✓	3	
	9	$\frac{2 \text{ mg}}{4 \text{ mg}} \times 1 \text{ tab(s)} = 0.5 \text{ tab(s)}$	Problem Setup $\frac{2 \text{ mg}}{4 \text{ mg}} \times 1 \text{ tab(s)}$	Calculation ✓ 0.5 tab(s)	Technical ✓	3	
	10	$\frac{30 \text{ mg}}{10 \text{ mg}} \times 1 \text{ tab(s)} = 3 \text{ tab(s)}$	Problem Setup $\frac{30 \text{ mg}}{10 \text{ mg}} \times 1 \text{ tab(s)}$	Calculation ✓ 3 tab(s)	Technical ✓	3	
		Total	10	Total	10	Total	10
				Grand Total		30	

Figure 39: A Printed Summary of a Section of the Final Assessment



# Help

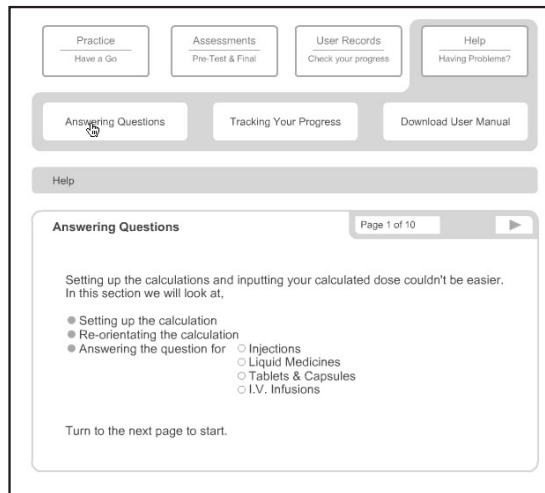
Selecting the **Help** option from the Main Menu opens a screen with three options.



**Figure 40: Options Available on the Help Page**

## Answering Questions

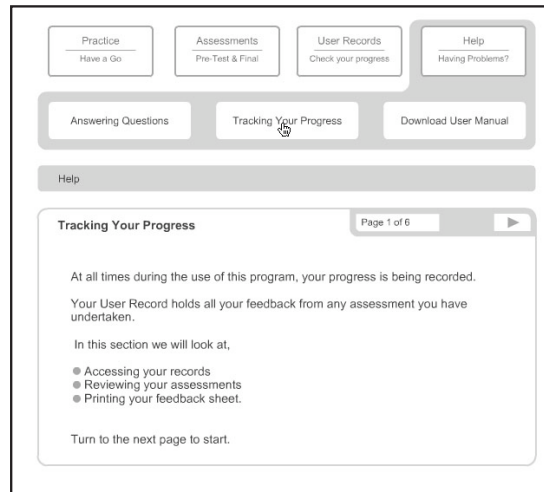
Selecting the **Answering Questions** option presents a series of animated help pages that illustrate how to answer the questions presented in the program.



**Figure 41: The Answering Questions Screen**

## Tracking Your Progress

Selecting the **Tracking Your Progress** option presents a series of animated help pages that illustrate how to access your progress.



**Figure 42: The Tracking Your Progress Screen**

## Downloading the User Manual

Selecting the **Download User Manual** option activates a copy of this User Guide in a new browser window.