

End of Module 4 Assessment Study Guide (Lessons 1 – 30)

There will be **10 questions** on this assessment. Be able to solve each of the problem-types below. This assessment covers all of Module 4 material. Using prior study guides is also a recommended way to prepare for this assessment.

Item 1: Evaluate (Solve)

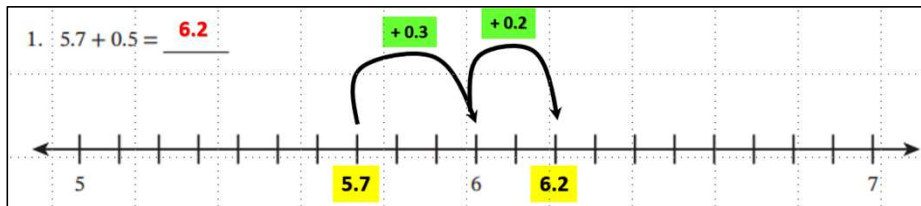
$$5.23 + 4.2 = \underline{9.43}$$

$$1.47 \div 0.42 = \underline{3.5}$$

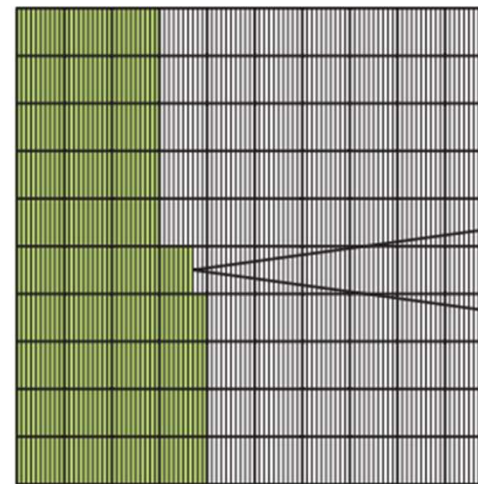
$$7.65 - 3.1 = \underline{4.55}$$

$$(0.05 + 5.14) - (3.45 \div 2.5) = \underline{3.81}$$

Item 3: Number line Method for Adding Decimals



Item 2: Model representing a decimal



This models shows the decimal:
0.347

Item 4: Converting Measurements

Large units into Smaller units = we **MULTIPLY**, because we will need more small units to equal the larger units.
Small units into Larger units = we **DIVIDE**, because we will need less larger units to equal the same amount of smaller units.

Large Units to Small Units:

Small Units to Large Units:

$$3.25 \text{ feet} = \underline{\hspace{2cm}} \text{ inches}$$

Feet are larger than inches, so we will need more than 3.25 inches. We need to multiply!

$$\begin{aligned} 3.25 \times 1 \text{ foot} \\ 3.25 \times 12 \text{ inches} \\ 39 \text{ inches} \end{aligned}$$

$$6.42 \text{ pounds} = \underline{\hspace{2cm}} \text{ ounces}$$

Pounds are larger than ounces, so we will need more than 6.42 pounds. We need to multiply!

$$\begin{aligned} 6.42 \times 1 \text{ pound} \\ 6.42 \times 16 \text{ ounces} \\ 102.72 \text{ ounces} \end{aligned}$$

$$51.2 \text{ centimeters} = \underline{\hspace{2cm}} \text{ meters}$$

Centimeters are smaller than meters, they are 1/100 of a meter. We need to divide.

$$\begin{aligned} 51.2 \times 1 \text{ cm} \\ 51.2 \times 0.01 \text{ meter} \\ 0.512 \text{ meter} \end{aligned}$$

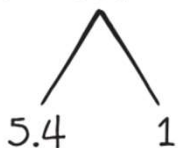
$$508 \text{ grams} = \underline{\hspace{2cm}} \text{ kilograms}$$

Grams are smaller than kilograms, they are 1/1,000 of a kilogram. We need to divide.

$$\begin{aligned} 508 \times 1 \text{ gram} \\ 508 \times 0.001 \text{ kilogram} \\ 0.508 \text{ kilograms} \end{aligned}$$

Item 5: Take from the Next Number Method for Adding & Subtracting Decimals

$$9.4 - 3.7 = 6.4 - 0.7 = 5.4 + 0.3 = 5.7$$



$$0.94 - 0.38$$

$$0.94 - 0.4 + 0.02 = 0.56$$

Be able to evaluate how an expression is solved using this strategy.

The problem is $9.4 - 3.7$. This problem is challenging to do using mental math. To make it simpler, take 3 away from both sides making the expression $6.4 - 0.7$.

It may be easier to mentally subtract $1 - 0.7$ to get 0.3.

Take 1 away from the 6.4 making it 5.4, and now combine the 5.4 and the 0.3 for the answer of 5.7.

Be able to evaluate how an expression is solved using this strategy.

The problem is $0.94 - 0.38$. This problem is challenging to do using mental math. To make it simpler, round 0.38 up to 0.4. It may be easier to mentally subtract $0.94 - 0.4$ to get 0.54. Now, you need to add in the difference of 0.02 to get 0.56.

Item 6: Comparing Place Values of Digits

375.3**7**4

The VALUE of the boxed 3 is 300.

The VALUE of the underlined 3 is 0.3. (3 tenths)

The value of the underlined 3 multiplied by 1,000 equals the value of the boxed 3.

The value of the boxed 3 multiplied by 1/1,000 equals the value of the underlined 3.

The VALUE of the boxed 7 is 0.07. (7 hundredths)

The VALUE of the underlined 7 is 70.

The value of the underlined 7 multiplied by 1/1000 equals the value of the boxed 7.

The value of the boxed 7 multiplied by 1,000 equals the value of the underlined 7.

Item 7: Word Problem with Decimals

Adesh has a total of 5.4 meters of rope.

He uses 3.9 meters of rope for a tire swing.

He uses the remaining rope to hang 5 bird feeders.

He uses the same amount of rope to hang each bird feeder.

How much rope does Adesh need to hang 1 bird feeder?

$$(5.4 - 3.9) \div 5$$

$$1.5 \div 5$$

0.3 meters

Item 8: Order Decimals

0.37 0.374 3.43 7.43 37.431 3.074

One of the best strategies for ordering decimals is to write them underneath each other or in a place value chart. Be sure to line up the decimals and each place value digit. Carefully compare each digit left to right and place them in the correct order. You may be asked to order them from LEAST to GREATEST or from GREATEST to LEAST. Read carefully! Try ordering these decimals from least to greatest.

Item 9: Compare decimals using >, < or =

Using the same strategy that you did to compare decimals, write them underneath each other to determine which decimal is greater or less than the other. Remember, some decimals may not have the invisible zero shown making them look different but are in fact equal. Just because a decimal may look longer (goes to the thousandths place) doesn't make a difference in value. Compare each place value digit.

$$115.123 < 115.213$$

$$15.10 = 15.1$$

$$0.23 > 0.099$$

$$0.071 < 0.170$$

Item 10: Write a word problem to match an expression.

$$1.3 + (4 \times 0.75)$$

A notebook costs \$1.30, and an eraser costs \$0.75. How much does it cost to buy 1 notebook and 4 erasers.

Eddie buys 1 bag of red apples that weighs 1.3 kilograms. He buys 4 bags of green apples that each weigh 0.75 kilograms. How many kilograms of apples does Eddie buy?