

Unit 5 Test Study Guide

Calculators should not be used.

1. Lin has 11.024 yards of fabric that she wants to create 4 costumes out of. How long will each piece of fabric be?

$$\begin{array}{r} 2.756 \\ 4 \overline{) 11.024} \\ \underline{-8} \\ 30 \\ \underline{-28} \\ 22 \\ \underline{-20} \\ 24 \\ \underline{-24} \\ 0 \end{array}$$
 2.756 yds

2. What is the quotient $2,956 \div 0.03$?

$$\begin{array}{r} 98533.\overline{3} \\ 3 \overline{) 295600.3} \\ \underline{-27} \\ 25 \\ \underline{-24} \\ 10 \\ \underline{-9} \\ 10 \\ \underline{-9} \\ 1 \\ \underline{-1} \\ 0 \end{array}$$
 98533. $\overline{3}$

3. Select **all** of the expressions that have the same value as $518 \div 2$.

- a. $528 \div 10$
- b. $5.18 \div 0.2$
- c. $5180 \div 20$
- d. $0.518 \div 0.002$
- e. $51.8 \div 0.02$

4. One way to find out $\frac{3}{4}$ of 73.5 is to multiply 73.5 by $\frac{3}{4}$. What is $\frac{3}{4}$ of 73.5?

$$\begin{array}{r} 73.5 \\ \times .75 \\ \hline 3675 \\ + 51450 \\ \hline 55125 \end{array}$$
 55.125

Find each quotient using long division.

5. $527 \div 17$

$$\begin{array}{r} 31 \\ 17 \overline{) 527} \\ \underline{-51} \\ 17 \\ \underline{-17} \\ 0 \end{array}$$

6. $1752 \div 4$

$$\begin{array}{r} 438 \\ 4 \overline{) 1752} \\ \underline{-16} \\ 15 \\ \underline{-12} \\ 32 \\ \underline{-32} \\ 0 \end{array}$$

A stack of 400 index cards is 2.16 inches tall.

7. Andre guesses that each index card is 0.025 inches thick. Is Andre correct?

No, that is to large.

$$\begin{array}{r} 0.0054 \\ 400 \overline{) 2.1600} \\ \underline{-2000} \\ 1600 \\ \underline{-1600} \\ 0 \end{array}$$

8. Compute the thickness of each card.

0.0054 inches

A sign in a grocery store gives these options:

- 16 cookies for \$31
- 14 cupcakes for \$25
- 28 cupcakes for \$49

Find each unit price to the nearest cent, and show your reasoning.

9. 16 cupcakes for \$31 \$1.94

10. 14 cupcakes for \$25 \$1.79

11. 28 cookies for \$49 \$1.75

12. Which option gives the lowest unit price?
28 cookies for \$49

13. Jada received a \$20 iTunes gift card for her birthday. She downloaded 6 songs which each cost \$0.97 and 1 app which costs \$2.64. How much money is left on Jada's gift card?

$$\begin{array}{r} 0.97 \\ \times 6 \\ \hline 5.82 \end{array}$$

$$\begin{array}{r} 5.82 \\ + 2.64 \\ \hline 8.46 \end{array}$$

$$\begin{array}{r} 20.00 \\ - 8.46 \\ \hline 11.54 \end{array}$$

\$11.54 left

⑨
$$\begin{array}{r} 1.937 \\ 16 \overline{) 31.000} \\ \underline{-16} \\ 150 \\ \underline{-144} \\ 60 \\ \underline{-48} \\ 120 \\ \underline{-112} \\ 80 \\ \underline{-80} \\ 0 \end{array}$$

⑩
$$\begin{array}{r} 1.785 \\ 14 \overline{) 25.000} \\ \underline{-14} \\ 110 \\ \underline{-98} \\ 120 \\ \underline{-112} \\ 80 \\ \underline{-70} \\ 100 \\ \underline{-98} \\ 20 \\ \underline{-14} \\ 60 \\ \underline{-56} \\ 40 \\ \underline{-42} \\ -2 \\ \underline{+2} \\ 0 \end{array}$$

14. Kiran and 3 of his friends are going to split the lunch bill of \$24.48. How much will each person have to pay?

$$\begin{array}{r} 6.12 \\ 4 \overline{) 24.48} \\ \underline{-24} \\ 04 \\ \underline{-4} \\ 08 \\ \underline{-8} \\ 0 \end{array}$$

\$6.12 per person

15. Han spent a total of \$221.76, before tax, on bags of chips for the basketball team, and each bag cost \$3.52. What is the total number of bags of chips that Han bought?

$$\begin{array}{r} 63 \\ 352 \overline{) 22176} \\ \underline{-2112} \\ 1056 \\ \underline{-1056} \\ 0 \end{array}$$

63 bags

16. Which will result in the greatest value?

- a. 5×0.3
- b. 5×0.4
- c. $5 \div 0.3$
- d. $5 \div 0.4$

17. Four rocks have the following weights: 4.29 grams, 4.71 grams, 3.55 grams, 5.48 grams. Diego uses estimation to determine the approximate weight of all the rocks. What should his estimation be?

Varies; $4 + 5 + 4 + 4 = 17$ grams

Sport	2011 Percent of Injuries in the U.S.	2012 Percent of Injuries in the U.S.
Basketball	25.9	27.3
Football	21.3	19.4
Baseball/softball	4.1	2.2
Soccer	4.6	5.1
Bicycling	8.1	8

$$\textcircled{18} \begin{array}{r} 21.3 \\ - 19.4 \\ \hline 1.9 \end{array}$$

$$\textcircled{19} \begin{array}{r} 8.1 \\ + 8.0 \\ \hline 16.1 \end{array}$$

$$\textcircled{20} \begin{array}{r} 2.2 \\ + 2.9 \\ \hline 5.1 \end{array}$$

Use the table to answer #18-20.

18. How much more percent of injuries occurred in 2011 than 2012 in football? 1.9%

19. What is the total percent of injuries that occurred in 2011 and 2012 in bicycling? 16.1%

20. Which sport had 2.9 percent more injuries in 2012 than baseball/softball? Soccer

21. M
to
fo
\$5.00
2.00
-\$2.50
-\$7.50
What
colle
60 students?

(21)

5.00	21
8.00	x 60
2.50	00
+ 7.50	+ 1260
<u>21.00</u>	<u>1260</u>

\$21 per student; \$1260 total

22. Priya wants to buy a MP3 player. It will cost her \$199.95. She already has \$56.52 in her piggy bank and her grandmother gave her \$60.00. How much more money does Priya have to save in order to have enough to buy the MP3 player?

56.52	199.95	583.43
+ 60.00	- 116.52	needed
<u>116.52</u>	<u>83.43</u>	

23. A bus travels at an average speed of 65.1 miles in 3 hours in the city. How far could the bus travel in 8.2 hours?

21.7	21.7
3 65.1	x 8.2
- 6	434
05	+ 17360
- 3	<u>177.94</u>
21	
- 21	
0	

177.94 miles in 8.2 hours

24. Sara's weekly paycheck is \$125.52. If Kim got paid 3.2 times more how much did Kim get paid?

125.52	5401.66
x 3.2	
25104	
+ 376560	
<u>401664</u>	

25. Noah has 4 bottles of water. 1 bottle has 0.456 liters of water. Bottle 2 has 0.95 liters of water. Bottle 3 has 0.5 liters of water and bottle 4 has 0.3478 liters of water. His goal is to drink 2.5 liters of water in a day, will he reach his goal? If yes, how much did he go over, if no, how much more does he still need?

0.4560	2.49310
0.9500	- 2.2538
0.5000	<u>0.2462</u>
+ 0.3478	
<u>2.2538</u>	

No he will not reach his goal and needs 0.2462L more.

26. A bag of marbles weighs 2.3 kilogram. Each marble weighs 1.25 grams. About how many pennies are in the bag? (Be careful, one's in kilograms and the other is in grams. You will need to convert K H D U D C M)

2.3 kg = 2300g

125 23000
- 125
1050
- 1000
500
- 500
0

1840 marbles