

## Chapter Three Practice Test Two

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1. Give two special cases for the general pattern  $k + m + m = k + (2 * m)$ .
2. Which of the following statements describe the case  $2 * 2.5 = 2.5 + 2.5$ ?
  - Doubling a number is the same as adding it to itself.
  - $2 * a = 2 + 2$
  - $2 * a = b + c$
  - $2 * a = a + a$
3. The formula below can be used to find length in centimeters when the length in inches is known.  $C$  is the number of centimeters, and  $i$  is the number of inches.

$$C = 2.54 * i$$

How many centimeters are there in 7 inches?

4. The formula below can be used to find length in centimeters when the length in inches is known.  $C$  is the number of centimeters, and  $i$  is the number of inches.

$$C = 2.54 * i$$

How many centimeters are there in 200 inches?

5. The formula below can be used to find length in centimeters when the length in inches is known.  $C$  is the number of centimeters, and  $i$  is the number of inches.

$$C = 2.54 * i$$

Circle the best approximation for the number of centimeters in 1 foot .

300

30

0.3

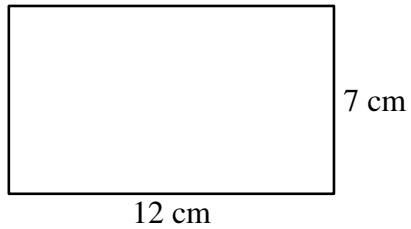
3.0

6. Find the area and the perimeter of each rectangle below.

$$\text{Area} = \text{Length} \times \text{Width}$$

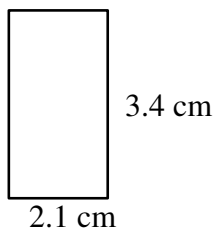
$$\text{Perimeter} = 2(\text{Length} + \text{Width})$$

a.



Area: \_\_\_\_  $\text{cm}^2$  Perimeter: \_\_\_\_ cm

b.



Area: \_\_\_\_  $\text{cm}^2$  Perimeter: \_\_\_\_ cm

7. Evaluate each expression when  $x = 3$ .

a.  $0.075 \times 10^x$

b.  $x^2 + 3^x$

c.  $x \times 10^{-4}$

d.  $x^0 + (-6)$

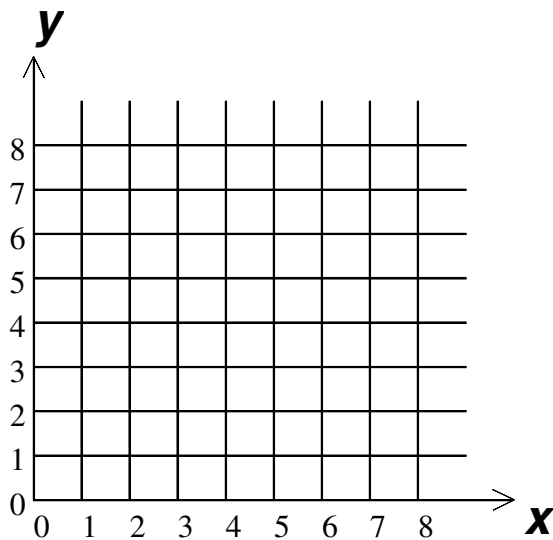
8. Mr. Dickson used the spreadsheet below to record his students' scores on three geography quizzes.

	A	B	C	D	E
1	Student	Quiz 1	Quiz 2	Quiz 3	Mean
2	Aaron	90	80	40	70
3	Beth	40	45	65	50
4	Carlin	75	81	78	78
5	Denny	66	69	75	

- What score did Denny receive in Quiz 3?
  - What score is shown in Cell D2?
  - Calculate Denny's mean score and write it in Cell E5.
  - Write a formula for calculating E5 that uses cell names.
9. Complete the table for the given rule. Then plot the points and connect them to make a line graph.

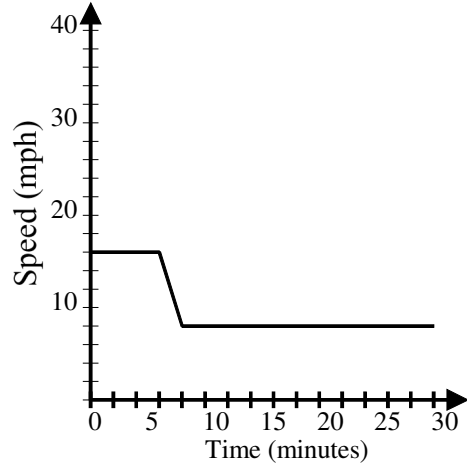
Rule:  $y = \left(\frac{1}{4} \text{ of } x\right) + 2$

<b>x</b>	<b>y</b>
2	
4	
6	
	$3\frac{3}{4}$
8	

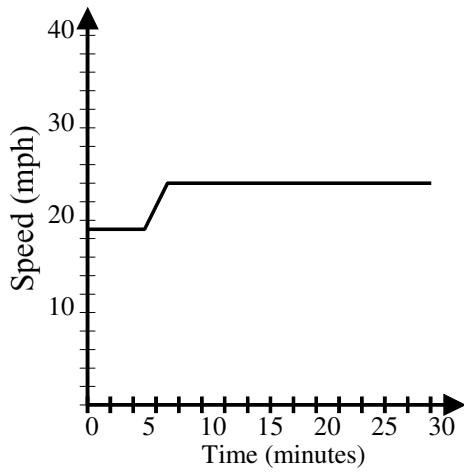


10. Label the graphs below with the most appropriate titles:  
bicyclist riding on a level road and then uphill  
bicyclist riding on a level road and then downhill  
bicyclist accelerating at a constant rate and then going at a constant speed

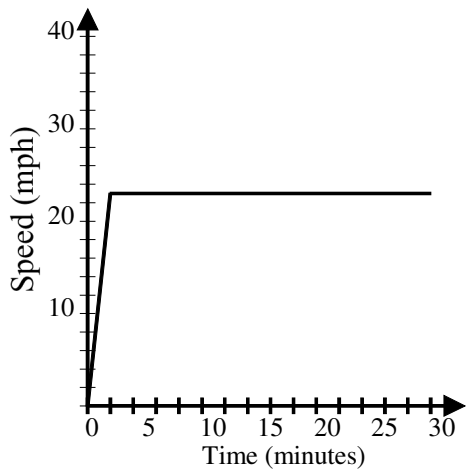
a.



b.



c.



(10.)

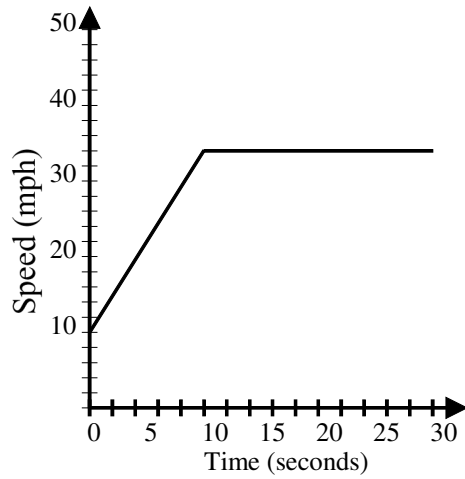
11. Label the graphs below with the most appropriate titles:

a car slowing down from a constant speed

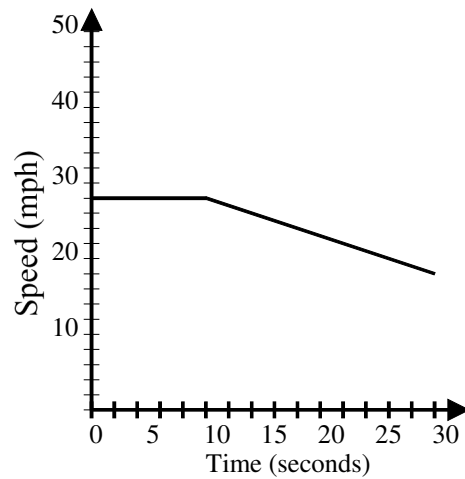
a car traveling at a constant speed

a car accelerating at a constant rate and then going at a constant speed

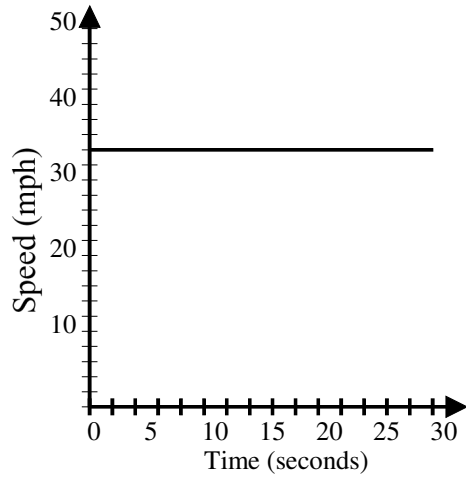
a.



b.



(11.)c.



12. Write  $\frac{11}{4}$  as a mixed number or a whole number.

13. Write  $4\frac{2}{5}$  as an improper fraction.

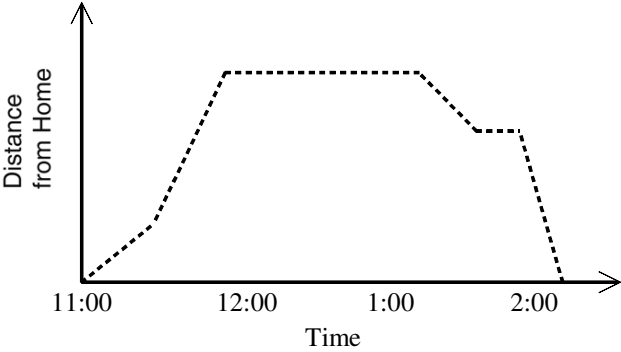
14. Find the greatest common factor of 2 and 36.

15. List the first 6 multiples of 3 and 6. Then name the least common multiple of 3 and 6.

16. Use estimation to insert the decimal point in the quotient.  
 $14.52/6 = 242$

17. Multiply mentally.  
 $1.4 \times 10^7$

18. Adena rode her bike from her home to the park, where she had a picnic with her friend Meredith. Then she rode her bike home. Use the graph to tell a story about Adena's bike ride.



## Chapter Three Practice Test Two

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[1] Sample answers:  $9 + 6 + 6 = 9 + (2 * 6)$ ;  $\frac{1}{3} + 9 + 9 = \frac{1}{3} + (2 * 9)$

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[2] Doubling a number is the same as adding it to itself;  $2 * a = a + a$

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[3] 17.78 cm

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[4] 508 cm

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[5] 30

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a.  $84 \text{ cm}^2$ ; 38 cm

[6] b.  $7.14 \text{ cm}^2$ ; 11 cm

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a. 75

b. 36

c. 0.0003

[7] d. -5

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a. 75

b. 40

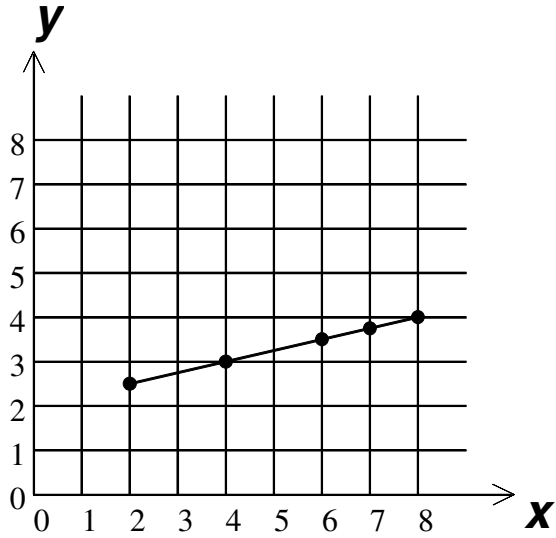
c.

	A	B	C	D	E
1	Student	Quiz 1	Quiz 2	Quiz 3	Mean
2	Aaron	90	80	40	70
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5	Denny	66	69	75	<b>70</b>

[8] d.  $E5 = (B5 + C5 + D5) \div 3$

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<b>x</b>	<b>y</b>
2	$2\frac{1}{2}$
4	3
6	$3\frac{1}{2}$
7	$3\frac{3}{4}$
8	4



[9] \_\_\_\_\_

- a. bicyclist riding on a level road and then uphill
- b. bicyclist riding on a level road and then downhill

[10] c. bicyclist accelerating at a constant rate and then going at a constant speed

- a. a car accelerating at a constant rate and then going at a constant speed
- b. a car slowing down from a constant speed

[11] c. a car traveling at a constant speed

[12]  $2\frac{3}{4}$  \_\_\_\_\_

[13]  $\frac{22}{5}$  \_\_\_\_\_

[14] 2 \_\_\_\_\_

- 3,6,9,12,15,18
- 6,12,18,24,30,36

[15] 6 \_\_\_\_\_

[16] 2.42

[17] 14,000,000

[18] Answers will vary.