Copy and complete the statement. Round to the nearest hundredth, if necessary.
(Section 3.6)

1. $10 \text{ mi} \approx \boxed{} \text{ km}$

2. $3 \text{ qt} \approx \boxed{} \text{ L}$

3. $29 \text{ kg} \approx \boxed{} \text{ lb}$

4. $6.8 \text{ in.} \approx \boxed{} \text{ cm}$

Tell whether x and y show direct variation. Explain your reasoning.   *(Section 3.7)*

5.

x	y
−3	0
−1	1
1	2
3	3

6.

x	y
−1	−2
0	0
1	2
2	4

7. $y - 9 = 6 + x$

8. $x = \dfrac{5}{8}y$

Tell whether x and y show *direct variation*, *inverse variation*, or *neither*. Explain your reasoning.   *(Section 3.8)*

9. $y = \dfrac{12}{x}$

10. $y - x = 9$

11.

x	y
−3	−2
−1	0
1	0
3	2

12.

x	y
1	2
2	1
4	0.5
8	0.25

13. HEIGHT The tallest player in Euroleague Basketball is 229 centimeters. The tallest player in the National Basketball Association is 90 inches. Which league has the tallest player?   *(Section 3.6)*

14. PIE SALE The table shows the profit of a pie sale. Tell whether there is direct variation between the two data sets. If so, write the equation of direct variation.   *(Section 3.7)*

Pies Sold	10	12	14	16
Profit	$79.50	$95.40	$111.30	$127.20

15. JEWELRY The number of beads on a bracelet varies inversely with the length of the beads. You use 8-millimeter beads to make a bracelet with 25 beads. How many 10-millimeter beads would you need to make a bracelet?   *(Section 3.8)*