

Lesson 88 • Review of Proportional and Non-Proportional Relationships

Power Up

- Facts
- Mental Math
- Problem Solving

New Concepts

- Examples
- Practice Set

Written Practice

Exit

Lesson
88

Page

Facts

Write each percent as a decimal and as a reduced fraction. Write repeating decimals with a bar over the repetend.

Percent	Decimal	Fraction
10%	0.1	$\frac{1}{10}$
90%	0.9	$\frac{9}{10}$
5%	0.05	$\frac{1}{20}$
40%	0.4	$\frac{2}{5}$
$12\frac{1}{2}\%$	0.125	$\frac{1}{8}$
50%	0.5	$\frac{1}{2}$

Percent	Decimal	Fraction
25%	0.25	$\frac{1}{4}$
20%	0.2	$\frac{1}{5}$
4%	0.04	$\frac{1}{25}$
75%	0.75	$\frac{3}{4}$
1%	0.01	$\frac{1}{100}$
$33\frac{1}{3}\%$	$0.\bar{3}$	$\frac{1}{3}$

Written Practice

1. a. 5 ft
b. 30 in.
2. 6500 yd^2
3. 21
4. $4x + 22$
5. $6x^3 - 2x^2 - 6x$
6. 45 in.^2
7. a. 27 ft^3
b. 9 ft^3
8. a. $\angle \text{ACB}, \angle \text{DCE}$
b. $\angle \text{ACD}, \angle \text{BCE}$
9. a. 12 cm^2
b. isosceles
10. a. 5 cm
b. 10 cm
11. $\frac{24}{25\pi}$; Sample answer: The fraction is less than $\frac{1}{3}$ because π is more than 3 and $\frac{24}{25 \cdot 3}$ is less than $\frac{1}{3}$.
12. a. $x = 9, y = \frac{7}{3}$
b. 1 to 3
13. $7\sqrt{2}$
14. $40\sqrt{2}$

Main Menu

Written Practice*continued*

15. $\frac{43}{12}$

16. 0.09

17. yes; 6; The time to complete tasks is 6 seconds times the number of tasks.

18. $10 \text{ km} \times \frac{1 \text{ mi}}{1.6 \text{ km}} \approx 6.2 \text{ mi}$

19. a. $55\frac{5}{9}\%$

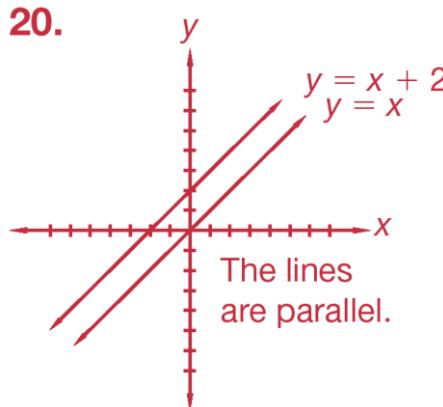
b. $0.\overline{5}$

c. 0.56

20. The lines are parallel.

21. $x = \frac{9}{16}$

22. $x = 3$



Written Practice

continued

23. $x = -40$

24. $n = -45$

25. Yes; $y = \frac{3}{4}x$; $\frac{3}{4}$ is the constant of proportionality

25.

