

Answers

Chapter 1

1. 699
2. 385
3. 321
4. 1056
5. 17
6. 57
7. 1, 2, 4, 8, 16
8. $4(9) = 126$
9. $8(6) = 48$ oranges
10. 81
11. 28

Chapter 2

1. $<$
2. $<$
3. $>$
4. 3
5. -4
6. -8
7. -8
8. 4
9. -32
10. 64
11. 36
12. -16

Chapter 3

1. $>$
2. $>$
3. 7.49
4. 4.264
5. 144.9
6. 4.56
7. 6

Chapter 4

1. 0.6
2. $>$
3. $\frac{1}{8}, \frac{2}{3}, \frac{5}{6}, \frac{7}{2}$
4. $\frac{2}{3}$
5. $\frac{23}{20}$ or $1\frac{3}{20}$
6. $\frac{1}{18}$
7. $\frac{15}{7}$ or $2\frac{1}{7}$
8. $\frac{3}{14}$
9. $\frac{9}{5}$ or $1\frac{4}{5}$

Chapter 5

1. -12
2. 14
3. 6
4. $2 \times 2 \times 7$

Chapter 6

1. -22
2. 27
3. $6b + 2$
4. $6x + 6$
5. $-32m$
6. $36xy$
7. $\frac{2x}{5y}$
8. $\frac{-2y}{5z}$

Chapter 7

1. x^{10}
2. x^8
3. $49y^{10}$
4. $\frac{3}{5}x^8$
5. 1
6. $\frac{2}{7}x^2$
7. 2.0×10^{-4}
8. 3.24×10^7
9. $4,720,000$
10. 0.00000037

Chapter 8 & Chapter 9

1. $x = -12$
2. $x = -7$
3. $x = -2$
4. $a = 24$
5. $x = -\frac{2}{3}$
6. $x = 3$
7. $y = -5$
8. $x = \frac{27}{7}$

Chapter 10

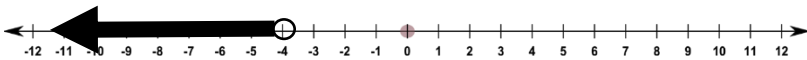
1. $3x + 6 = 18$, *The number is 4*
2. $4.75h = 855$, *180 hats*
3. $13h + 200 = 616$, *32 hours*
4. $125 = 75t$, $1\frac{2}{3}$ *hours, or 1 hour and 40 min.*

Chapter 11

1. $x \leq 8$

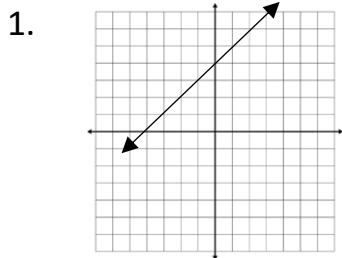


2. $x < -4$



3. $8t \geq 200$, *25 tickets or more*

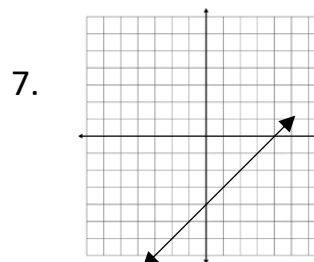
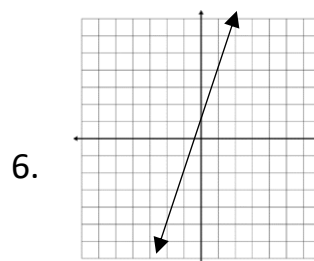
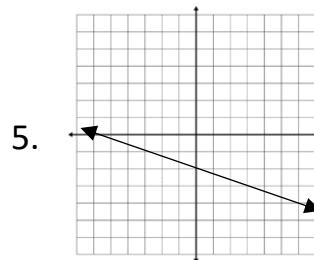
Chapter 12



2. $m = -\frac{3}{2}$

3. $m = \frac{1}{2}$

4. $m = \text{undefined}$



Chapter 13

1. $\frac{8 \text{ hits}}{3 \text{ non-hits}}$
2. \$3.66 per pomegranate
3. $x = 2.8$
4. $\frac{2}{7} = \frac{12}{x}$, 42 people
5. 75%
6. 60 people

Chapter 14

1. 20 in^2
2. 615.44 cm^2
3. 65°
4. 48 in.
5. 25.12 mm
6. $12\pi \text{ in.}$

Chapter 15

1. 12.5%
2. 0.5%
3. 2.2%
4. 1.7%
5. 40.86, 45, None
6. 120 Options
7. 4 – 22 or 18, 4 – 7, 13.5 – 22, 11, 13.5 – 22, 7 – 22, 4 – 11