

Week 1

1. =            2. <            3. <

4. -4, -3; -3    5. 3            6. 4

7. 38 meters below base camp

8. 13    9. 0    10.  $7^{\circ}\text{C}$     11.  $-28$

12.    -30    13.    3    14.    -3    15.    -2

16.        0    17.    -3    18.    4    19.    -31

20.        3    21.    13    22.    -6    23.    96, -192

24. -20,000, 200,000

25.a.  $22^{\circ}\text{F}$ ;  $-15^{\circ}\text{F}$     b.  $37^{\circ}\text{F}$     c.  $-21^{\circ}\text{F}$     d.  $0^{\circ}\text{F}$

e. *Sample answer:* You do not know what the temperature was at other points during the day.

26.a. (4, 1)    b. (-2, 3)    c. (1, 0)

d. (3, -2)    e. (0, -4)    f. (-1, -2)

27. point  $F$

28.a. (-3, 1)    b. Quadrant II

Week 2

1.  $-\overline{0.27}$     2.  $-3.65$     3.  $3\frac{21}{50}$     4.  $-\frac{7}{20}$

5. your friend's    6.  $9.29$

7.  $\frac{2}{3}$     8.  $\frac{2}{3}$     9.  $\$7.84$     10.  $\frac{1}{2}$

11.  $-0.09$     12.  $-0.35$     13.  $\frac{3}{4}$

14. 12 packages;  $8 + \frac{2}{3} = 8 \cdot \frac{3}{2} = 12$ .

15.  $n = 27$     16.  $d = -13$     17.  $p = 2\frac{7}{8}$

18.  $w = 10$     19.  $h = 8$     20.  $x = 8.6$

21.  $w + 6 = 2$ ;  $w = -4$

22.  $\frac{3}{4}s = \frac{3}{5}$ ;  $s = \frac{4}{5}$

23. Let  $d$  be the number of degrees the temperature increased.  $-4 + d = 8$ ;  $d = 12$ ; it increased by  $12^\circ\text{F}$ .

24. Let  $s$  be the number of students in the seventh grade;

$\frac{1}{8}s = 44$ ;  $s = 352$ ; 352 students

25.  $d = 7$     26.  $z = -16$

27.  $y = -5$     28.  $f = -2.4$

29. 6 feet; Let  $w$  be the width of the garden;  
 $2(12) + 2w = 36$ ;  $2w = 12$ ;  $w = 6$ ; the width  
is 6 feet.

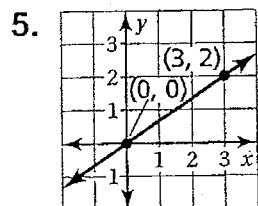
### Week 3

1.  $\frac{5 \text{ girls}}{2 \text{ boys}}$

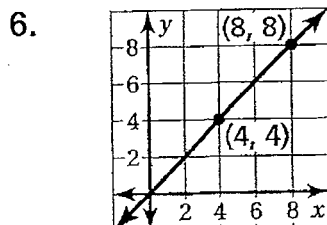
2.  $\frac{8 \text{ players}}{1 \text{ team}}$

3. 81 rotations per min

4. 6 oz per serving



slope:  $\frac{2}{3}$



slope: 1

7. yes

8. no

9.  $\frac{5}{3} = \frac{12}{c}$

10. 8 11. 308 12. 5 13. 4.5

14. 7.62 15. 4.21 16. 48 17. 1.13

18. 15 min per quarter

19. 2 games; If  $g$  is the number of games the team

must win, then  $\frac{6+g}{4} = \frac{2}{1}$ ;  $6+g = 4(2)$ , or 8,

so  $g = 2$ .

20. \$116

21. a.  $c = \frac{1248}{n}$  b. \$104

#### **Week 4**

1.  $17 = p \cdot 68$ ; 25%
2.  $a = 0.16 \cdot 80$ ; 12.8
3.  $21 = 0.35 \cdot w$ ; 60
4.  $70 = p \cdot 56$ ; 125%
5. increase; 40%
6. decrease; 60%
7. decrease; 75%
8. increase; 1%
9. 46 employees
10. 84 pounds
11. \$94.08
12. 615 brushes
13. \$73.80
14. 2 years
15. \$150
16. \$720
17. 6.5%
18. \$260
19. \$2090
20. \$5.88
21. 20% increase
22. store B; the cost at store A is \$90.30, at store B is \$87.75, and at store C is \$90, so the cost is the lowest at store B.
23. 3 years

Week 5

1.  $\angle S$

2. Side  $TU$

3. perimeters,  $\frac{3}{8}$ ; areas,  $\frac{9}{64}$

4.  $x = 8$

5. 48 cm

6. 3.5 in.

7. yes

8.  $4.5 \text{ in}^2$

9.  $81 \text{ ft}^2$

10. 7 in.

11.  $664 \text{ in}^2$

12.  $1,120 \text{ in}^3$

13.  $864 \text{ in}^2$

14.  $1,728 \text{ in}^3$

## Week 6

- 1.) 44 trophies
- 2.) 210 pages per day
- 3.) 190 baseballs
- 4.) 568 pens left
- 5.) 128 apples
- 6.) 7°F
- 7.) 17 sections
- 8.) 9 pencils per student.
- 9.) \$64
- 10.) 1 video game
- 11.) 11 containers
- 12.) \$31
- 13.) 384 words per day
- 14.) 3,000 feet
- 15.) 30 books
- 16.) -\$3
- 17.) Patricia drove the most miles
- 18.) -16°F
- 19.) \$0.37
- 20.) 26 candles

**Week 8**

1. 1, 3                      2. no favorable outcome

3. 4, 8    4.  $\frac{1}{9}$             5. 0            6.  $\frac{1}{3}$

7. a. 3    b. white square, black square, grey square

8. a. 1    b. white circle

9. a. 4

    b. white circle, white square, black square, grey square

10.             $\frac{7}{10}$     11.            49 batteries    12.             $\frac{4}{15}$

13.             $\frac{8}{15}$     14.             $\frac{11}{15}$     15.            112 songs

16. Independent; second flip is not affected by the first flip.

17. Dependent; one person cannot fill two seats on the student council.

18.             $\frac{1}{8}$     19.             $\frac{1}{4}$     20.             $\frac{3}{8}$     21.             $\frac{1}{30}$