Answers Algebra I Problem Set 1

1. {1, 2, 3, 4, . . . }
2. {. . . –3, –2, –1, 0, 1, 2, 3, . . .}
3. {0, 1, 2, 3, . . . }

4. May be fractions, decimals that terminate or repeat, and any subset numbers.

5. True
6. True

7. False. Multiples of 5 are a subset of the whole numbers.

8. True
9. True

10. False. $N \subset Q$
11. False. $J \subset \Re$
12. True

13. True
14. True

15a) True b) False c) False d) True e) True

16. 7 and 7
17. 5 and 5
18. 26 and 26

19. 0 and 0
20. 17.6 and 17.6
21. $2\frac{1}{3}$ and $2\frac{1}{3}$

22. 12
23. 16
24. 42

25. 15
26. 22
27. 74

28. 5
29. 7
30. 45

Answers Algebra I Problem Set 2

1. {. . . –3, –2, –1, 0, 1, 2, 3, . . .}
2. {3, 6, 9, 12, 15, . . . }

3. False
   Multiples of 4 are a subset of multiples of 2.
4. False
   $W \subset J$

5. False , $N \subset Q$
6. True

7. 6
8. -1
9. 2
10. -13

11. -15
12. 21
13. -1
14. 5

15. 9 16. -6 17. -8 18. 10

19. b = 15 20. c = 17 21. d = -19 22. f = -8

23. g = 13 24. h = -20 25. j = -7 26. k = 7

27. m = -14 28. n = 6 29. p = -12 30. w = -23

Answers Algebra I Problem Set 3

1. {6, 12, 18, 24, . . . } 2. {0, 1, 2, 3, . . . }

3. {. . . -3, -2, -1, 0, 1, 2, 3, . . .} 4. {1, 2, 3, …} 5. $\frac{17}{25}$

6. $\frac{9}{14}$ 7. $\frac{7}{16}$ 8. $\frac{11}{10} = 1\frac{1}{10}$ 9. $-\frac{2}{15}$

10. $\frac{17}{15} = 1\frac{2}{15}$ 11. $\frac{1}{12}$ 12. $\frac{19}{70}$ 13. $\frac{13}{30}$

14. $\frac{5}{36}$ 15. $-\frac{1}{15}$ 16. $\frac{13}{35}$ 17. $-\frac{7}{12}$

18. $\frac{17}{28}$ 19. $-\frac{5}{6}$ 20. $\frac{3}{10}$ 21. $-\frac{3}{40}$

22. $d = \frac{1}{4}$ 23. $g = \frac{9}{10}$ 24. $h = \frac{1}{6}$ 25. $k = \frac{5}{8}$

26. $m = -\frac{5}{12}$ 27. $x = \frac{11}{21}$ 28. $AC = \frac{26}{35}$ 29. $AB = \frac{7}{33}$

30. $BC = \frac{13}{40}$

Answers Algebra I Problem Set 4

1. { 0, 1, 2, 3, … } 2. $3\frac{1}{24}$

3. $5\frac{19}{28}$ 4. $4\frac{7}{15}$ 5. $10\frac{5}{6}$ 6. $4\frac{1}{12}$

7. $14\frac{17}{21}$

8. $6\frac{1}{8}$

9. $7\frac{4}{15}$

10. $1\frac{13}{21}$

11. $8\frac{11}{20}$

12. $3\frac{21}{40}$

13. $5\frac{19}{24}$

14. $2\frac{27}{44}$

15. $8\frac{7}{20}$

16. $3\frac{7}{10}$

17. $\frac{7}{12}$

18. $-\frac{1}{3}$

19. $\frac{4}{15}$

20. $-\frac{11}{15}$

21. -11

22. -6

23. 4

24. 17

25. -9

26. 3

27. 15

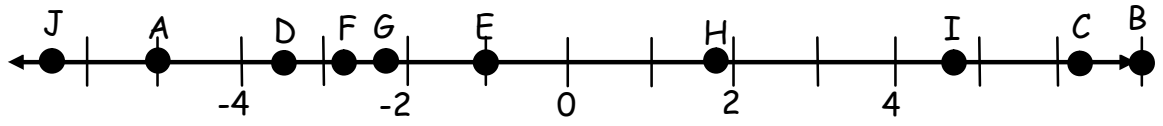
28. 0

29. $XZ = 5\frac{1}{14}$

30. $YZ = 3\frac{5}{6}$

Answers Algebra I Problem Set 5

1. $A = -6$, $B = -4.5$, $C = -4$, $D = -2.25$, $E = -0.75$, $F = 0.5$, $G = 1.8$, $H = 3$, $I = 4$, $J = 6$

2. 

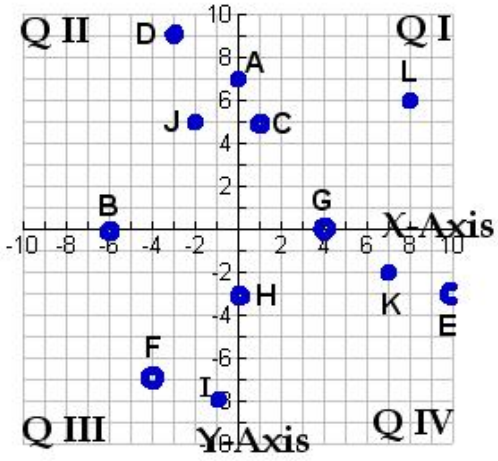
3. XY = 6, YZ = 9, XZ = 15

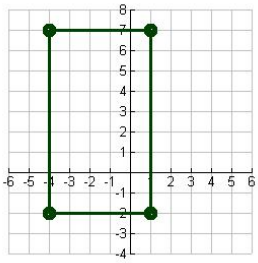
4. XY = 9, YZ = 15, XZ = 24

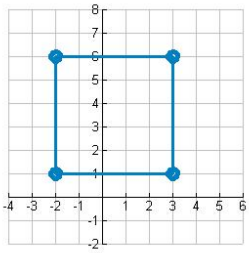
5. XY = 8, YZ = 6, XZ = 16

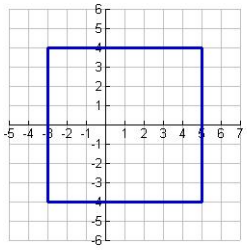
6. XY = 2, YZ = 3, XZ = 5

7. A(5, 3), B(1, 6), C(−2, 7)
D(−7, 6), E(−6, −1), F(−4, −7)
G (0, −3), H(1, −6), J(3, −4)
K(7, 0)

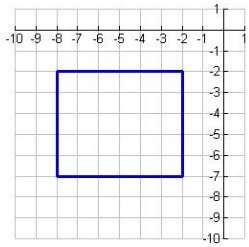
8. 

9. 
P = 28

10. 
P = 20

11. 

P = 32

12. 

P = 22

13. $8\frac{35}{72}$

14. $2\frac{3}{4}$

15. $12\frac{11}{12}$

16. $-4\frac{11}{20}$

17. $x = 4\frac{13}{21}$

18. $w = 1\frac{7}{15}$

19. $g = 1\frac{1}{12}$

20. $b = -\frac{17}{24}$

21. 7

22. -13

23. 8

24. 3

25. -31

26. -800

27. {. . . –3, –2, –1, 0, 1, 2, 3, . . .}

28. {1, 2, 3, 4, . . .}

29. False Multiples of 9 are a subset of multiples of 3.

30. False The states that begin with the letter A are a subset of the states that border Colorado.