

Summer Assignment

Welcome to 8th grade at Flat Rock Middle School! We hope that you have had a wonderful summer. Since it would be in your best interest to review some mathematics this summer in preparation for this challenging and fun class, we're providing you with some review problems for you to complete this summer. These are concepts that were covered in your 7th grade math class. Little time will be spent reviewing this material. **The 8th grade teachers will collect these problems on the first day of school.** If you need a refresher on any topics, we recommend visiting www.khanacademy.org.

Please remember that you can also log into Study Island to view and practice the 8th grade standards. If you click on the blue lesson tab, you will find notes on how to complete the lessons. You will have to complete the pretest before you can unlock the other topics.

Study Island Log In Information (it will not change from your 7th grade year)

Username: Firstname.Lastname.FRMS

Password: Your Student Id #

Start your 8th year off on the right track by staying sharp this summer! We look forward to seeing you in August.

Sincerely,

The Accelerated 7th Grade Math Team

Mrs. D. Monique Williams, and Mr. Carby

P.S. If you have any questions, please feel free to email us at

williams.monique@mail.fcboe.org, or carby.nateil@mail.fcboe.org.

Due: First day of school

Order of Operations

1. $8 + 7 \cdot 9$

2. $12 + 4^2$

3. $35 - (17 - 2) \div 5$

4. $24 - 9 \cdot 2 + 6 \div 3$

5. $\frac{90 - 22}{28 - 11}$

6. $\frac{45 + 3}{9}$

7. $12(2 + 7) - 24 \div 12$

8. $4(9 - 3) \div (8 - 2)$

9. $26 - [(25 - 11) - 2^3]$

10. $(8^2 - 2^5) \div (24 \div 6) + 3^2$

11. $\frac{12(30 - 12)}{3^2}$

12. $\frac{5(16 - 5) - 1}{4^2 - 7}$

Substitute and evaluate: $x = 8$, $y = 6$, $m = 3$, $p = \frac{1}{2}$, $n = \frac{3}{4}$

13. $4x - 2m$

14. $5y + 8p$

15. $nxy \div m$

16. $2(3x + 6) \div (10m)$

17. $2ny + x$

18. $(x + y) \div p$

19. $6p + 8n$

20. $my - 2x$

Integers Operations

1. $8 + (-5) =$

4. $-6 - 8 =$

7. $15 + (-3) =$

10. $7 - (-8) =$

13. $14 - 17 =$

16. $3x + 12x =$

19. $(-3) + (-3) =$

22. $11 + (-14) =$

25. $-12 + (-18) =$

28. $1 - (-5) =$

31. $-80 \div -4 =$

34. $16 - 33 =$

37. $-9 \times 6 =$

40. $(-3)(15) =$

43. $20 \cdot -5 =$

46. $(-24)(-2) =$

49. $-9 \cdot 7 =$

2. $-5 + (-4) =$

5. $13 + (-25) =$

8. $-4 + 4 =$

11. $-10 + (-10) =$

14. $9x - (-4x) + 3x =$

17. $-11x + (-9x) =$

20. $5x + 8x + (-5x) =$

23. $4a + 9a + (-13a) =$

26. $20x + (-9x) + 3x =$

29. $6x + 12x + (-7x) =$

32. $4 \times -15 =$

35. $-10 - 17 =$

38. $18 + -39 =$

41. $\frac{-36}{-3} =$

44. $-42 / 7 =$

47. $-15 / -15 =$

50. $\frac{-48}{12} =$

3. $14 + 7 + (-4) =$

6. $-9 + (-4) + (-3) =$

9. $-6 + 10 + (-8) =$

12. $23 + (-6) + 2 =$

15. $4 + (-7) + (-8) =$

18. $-12x + (-4x) + (-5x) =$

21. $-8 - 7 - 12 =$

24. $5 - 12 + 7 =$

27. $6 + (-4) - (-9) + 7 =$

30. $-9 + (-5) + 14 - (-6) =$

33. $(-4)(-3) =$

36. $\frac{-60}{-10} =$

39. $19 - 31 =$

42. $\frac{-55}{5} =$

45. $-5 \times 8 =$

48. $-45 \div 5 =$

51. $\frac{-16}{-16} =$

Solving Equations

1. $x - 10 = 11$

2. $23 + x = -10$

3. $x - 15 = -37$

4. $-2 + x = -10$

5. $x + 14 = 12$

6. $x - 8 = 21$

7. $\frac{x}{10} = -7$

8. $25 = -5x$

9. $\frac{x}{-2} = -6$

10. $2y = -14$

11. $\frac{y}{-7} = 12$

12. $-22 = -11y$

13. $4x + 13 = 5$

14. $12 = -x - 11$

15. $-5y + 6 = -9$

16. $-1 = \frac{x}{4} - 7$

17. $\frac{y}{3} - 8 = 1$

18. $-3(b + 9) = -6$

19. $5x + 1 = 31$

20. $3x - 1 = 8$

21. $7x = 60 + 2x$

22. $3x = 72 - 3x$

23. $6x + 4 = 20 - 2x$

24. $6x + 3 = 23 + x$

25. $5x + 4 = 2x + 17$

26. $5x + 11 = 20x - 64$

27. $-x = 17 + 3x$

Solving Proportions

1. $\frac{4}{9} = \frac{10}{x}$

2. $\frac{5}{2} = \frac{6}{x}$

3. $\frac{5}{2} = \frac{2}{x}$

4. $\frac{21}{27} = \frac{x}{18}$

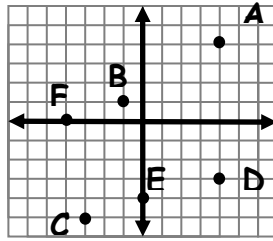
5. $\frac{15}{21} = \frac{20}{y}$

6. $\frac{26}{b} = \frac{39}{9}$

Coordinates on a Coordinate Plane

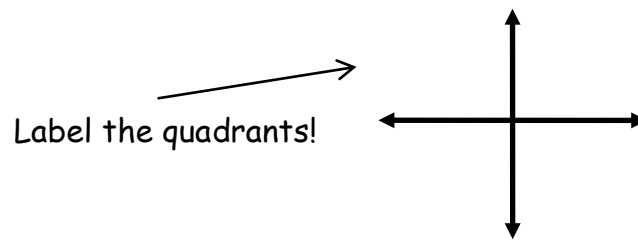
Write the ordered pair for each point.

1. A _____
2. B _____
3. C _____
4. D _____
5. E _____
6. F _____



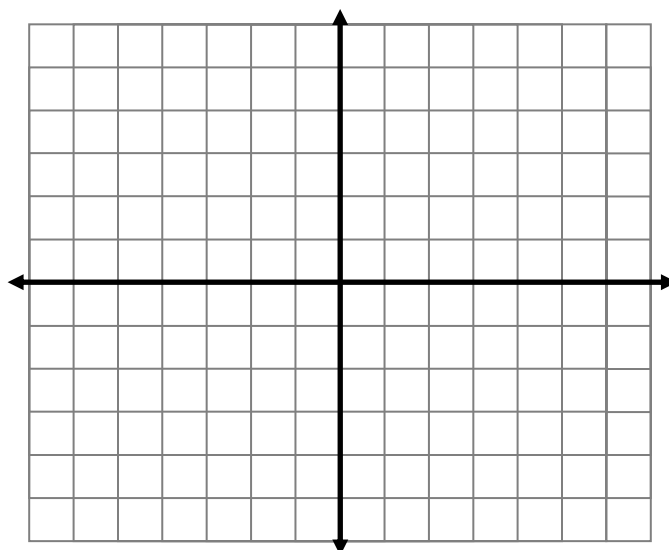
Name the quadrant or location of each point.

7. (5, 2) _____
8. (-3, -1) _____
9. (-2, 3) _____
10. (6, 0) _____
11. (0, -2) _____
12. (4, -3) _____



Graph & label each point on the coordinate plane.

13. A(5, -2)
14. B(3, 5)
15. C(-3, 0)
16. D(-3, 4)
17. E(-3, -3)
18. F(-5, 1)
19. G(2, -1)
20. H(0, 4)



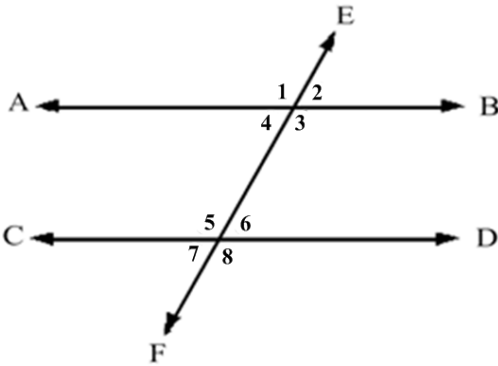
Area of a circle formulas $\rightarrow A = \pi r^2$ Use the 3.14 for π

1) radius of a circle = 4 m 2) diameter of a circle = 9 cm 3) radius of a circle = 6 in

4) radius of a circle = 2.5 ft 5) diameter of a circle = 18 cm 6) diameter of a circle = 20 in

Transversals & Angles

$AB \parallel CD$ and are cut by transversal EF . Given: $m\angle 2 = 60^\circ$.



a) $m\angle 1 =$ ____ b) $m\angle 2 =$ ____

c) $m\angle 3 =$ ____ d) $m\angle 4 =$ ____

e) $m\angle 5 =$ ____ f) $m\angle 6 =$ ____

g) $m\angle 7 =$ ____ h) $m\angle 8 =$ ____

i) Identify a pair of vertical angles.

j) Identify a pair of supplementary angles.

k) Identify an obtuse angle.