

Dear Future Accelerated Math 7 Student/Parent,

Congratulations! We are excited for you to come to Arroyo Seco Junior High next year. In an effort to ensure students are successful in the Accelerated Program we recommend completing the attached summer review problems. The problem set is designed to help you make the transition to this challenging course as smooth as possible.

Answer keys for the problems will be posted on the Arroyo Seco website along with instructional videos and additional practice problems for you to try. If you choose to complete the summer review problems, please turn it in to your teacher on the 1st day of school.

Sincerely,

Your Seco Math Teachers

Accelerated Math 7 Summer Review Problems

Integer Operations:

Use the symbols $<$ or $>$ to describe the relationship between the numbers.

1. $7 \square -5$

2. $-1 \square 1$

3. $-6 \square -8$

4. $-\frac{1}{4} \square -\frac{1}{2}$

5. $-\frac{3}{5} \square -\frac{5}{8}$

Simplify each expression.

6. $7 - (-5)$

7. $-4 + 11$

8. $7 - 12$

9. $13 + (-2) + (-9)$

10. $-5 - 12 + (-3) - (-1)$

11. $7(-6)$

12. $-54 \div (-6)$

13. $2(-3)(10)$

14. $-30 \div 5$

15. $-3(10 \div 2)$

Evaluate each expression if $a = -3$, $b = 6$, and $c = -9$.

16. $\frac{ab}{c} - 6$

17. $ab \div c$

18. $ac + b$

19. $\frac{b}{a} - c$

Operations with Fractions:

Write each fraction in simplest form. If the fraction is already in simplest form, write *simplified*.

20. $\frac{5}{25} =$

21. $\frac{60}{80} =$

22. $\frac{12}{30} =$

23. $\frac{11}{25} =$

24. $\frac{24}{48} =$

25. $\frac{22}{53} =$

26. $\frac{6}{48} =$

Find each product or quotient. Write in simplest form.

27. $\frac{2}{9} \cdot \frac{3}{5}$

28. $-\frac{6}{11} \cdot \frac{3}{8}$

29. $-\frac{10}{13} \cdot (-2)$

30. $\frac{5}{6} \div \left(\frac{-7}{18}\right)$

31. $-\frac{2}{9} \div \left(-\frac{8}{15}\right)$

Find each sum or difference. Write in simplest form.

32. $\frac{3}{12} - \frac{5}{12}$

33. $-\frac{3}{7} + \frac{5}{14}$

34. $\frac{5}{6} - 2$

35. $-\frac{2}{5} - \frac{5}{8}$

36. $\left(-\frac{8}{9}\right)\left(\frac{1}{2}\right) + \frac{2}{3}$

Evaluate each expression if $a = 2\frac{1}{2}$, $c = 6$, $p = \frac{1}{3}$ and $r = \frac{5}{8}$

37. pr

38. $r \div a$

39. $c + p$

40. $pc - r$

41. $ac + p$

Percent and Unit Rate

Write each percent as a decimal and as a fraction in simplest form.

42. 25%

43. 18%

44. 7%

45. 103%

46. 5%

Convert each fraction into decimal and then write it as a percent.

47. $\frac{85}{100}$

48. $\frac{7}{10}$

49. $\frac{5}{25}$

50. $\frac{7}{8}$

51. $\frac{15}{60}$

Solve the following problems.

52. What is 15% of 28?

53. What percent of 50 is 36?

54. 30 is 40% of what number?

55. What is $33\frac{1}{3}\%$ of 51?

56. 16 is 25% of what number?

57. What percent of 20 is 12?

Find the following unit rates.

58. Nine rolls of stamps cost \$423. What is the cost of one roll of stamps?

59. Eight yards of fabric cost \$180. How much does one yard of fabric cost?

60. Teddy swims 25 laps in 20 minutes. At this rate, how many laps can he swim in 32 minutes?

61. An artist used 4 pounds of clay to make 28 identical vases. If 5 pounds of clay had been used, how many vases could have been made?

An answer key can be found on the Arroyo Seco Website:

www.arroyosecojuniorhigh.com

Instructional videos for each topic along with additional practice problems can also be found there.