

Pre-Algebra Review
(5.3-5.5)

Name: Key
Date: _____ Per: _____

Evaluate.

1. $\left(-\frac{1}{3}\right)^2 - \frac{3}{7} \div \frac{7}{14}$

$\frac{1}{9} + -\frac{3}{7} \div \frac{21}{14}$

$\frac{1}{9} + -\frac{3}{7} \cdot \frac{14}{21}$

$\frac{1}{9} + -\frac{2}{7}$

$\frac{1}{9} + -\frac{2}{7} = \frac{1}{63} - \frac{18}{63} = -\frac{17}{63}$

$-\frac{17}{63}$

2. $3\frac{2}{3} \cdot \left(-2\frac{3}{4}\right) - 5\frac{2}{3}$

$\frac{11}{3} \cdot -\frac{11}{4} + -5\frac{2}{3}$

$-\frac{121}{12} + -5\frac{8}{12}$

$-10\frac{1}{12} + -5\frac{8}{12}$

$-15\frac{3}{4}$

3. $6\frac{1}{5} - 9\frac{4}{7}$

$6\frac{7}{35} + -9\frac{20}{35}$

$-3\frac{13}{35}$

4. $-4\frac{2}{5} - \left(-5\frac{5}{6}\right)$

$-4\frac{12}{30} + 5\frac{25}{30}$

$1\frac{13}{30}$

5. $8 - 16 \div (-2) + (-3)^2$

$8 + -16 \div -2 + 9$

$8 + 8 + 9$

$16 + 9$

25

6. $-8 - \left(-1\frac{4}{5}\right) \div \frac{5}{7}$

$-8 + 1\frac{4}{5} \cdot \frac{7}{5}$

$-8 + \frac{28}{5}$

$-8 + \frac{56}{10} = -8 + \frac{28}{5} = -\frac{12}{5}$

$-\frac{12}{5}$

7. $(-8.73 - 4.2) - 10.5$

$(-8.73 + -4.2) + -10.5$

$-12.93 + -10.5$

-23.43

8. $(-4.2)(3.8)$

-15.96

9. $\left(-1\frac{2}{3}\right)\left(2\frac{3}{5}\right)^2$

$-\frac{5}{3} \cdot \frac{13}{5}$

$-13/3$

$-4\frac{1}{3}$

10. $-4(-2.6 + 18.34)$

$-4(-20.94)$

83.76

$-\frac{8}{3} \cdot \frac{13}{81} \cdot \frac{13}{5}$

$-\frac{8}{3} \cdot \frac{169}{255}$

$-\frac{169}{765}$

$-\frac{169}{765}$

$-\frac{169}{765}$

11. $\frac{2}{3}\left(1\frac{5}{7} - 4\frac{1}{2}\right)$

$\frac{2}{3}\left(1\frac{10}{14} + -4\frac{7}{14}\right)$

$\frac{2}{3}\left(-2\frac{11}{14}\right)$

$\frac{2}{3} \cdot -\frac{39}{14} = -\frac{78}{42} = -\frac{13}{7}$

$-\frac{13}{7}$

$3\frac{8}{9} - \left(-2\frac{3}{12}\right)$

$3\frac{32}{36} + 2\frac{9}{36}$

$6\frac{5}{36}$

$3\frac{27}{14} - 2\frac{11}{14} = \frac{34}{14} = 2\frac{11}{14}$

Integer/Real number review

13. $4 - 11 + (-7) - (-5)$

$4 - 11 + -7 + 5$

$-18 + 9$

-9

14. $15.87 + (-7.9)$

7.97

15. $2(5) - 3(7)$

$10 + -21$

-11

16. $\frac{3}{4} - \frac{8}{9}$

$\frac{3}{4} + -\frac{8}{9}$

$\frac{27}{36} + \frac{-32}{36}$

$-\frac{5}{36}$

17. $15 + (-8) + 7 + 6$

$15 + -15 + 6$

6

18. $\frac{2}{3} + (-\frac{1}{3}) + \frac{5}{3} + 1$

$1\frac{2}{3} + -\frac{1}{3}$

$1\frac{1}{3}$

$\frac{4}{3}$

19. $5(6 - 8) + 11[2 + (+5)]$

$5(-2) + 11(7)$

$-10 + 77$

67

20. $2.5 - 6.7 + (-1.9) + 5$

$2.5 + -6.7 + -1.9 + 5$

$-8.6 + 7.5$

-1.1

21. $-6 - (-12) + -7 - 10$

$-6 + 12 + -7 + -10$

$-13 + 12 + -10$

$-23 + 12$

-11

22. $2\frac{1}{2} + (-9\frac{3}{8})$

$2\frac{4}{8} + -9\frac{3}{8}$

$-7\frac{7}{8}$

$2\frac{4}{8} - 9\frac{3}{8} = -7\frac{7}{8}$

23. $-45 + \frac{1}{2} - (-\frac{5}{8}) \div \frac{1}{2}$

$-\frac{9}{20} + \frac{1}{2} + \frac{5}{8} \cdot \frac{2}{1} =$

$-\frac{9}{20} + \frac{1}{2} + \frac{5}{4}$

$-\frac{9}{20} + \frac{10}{20} + \frac{25}{20}$

$-\frac{9}{20} + \frac{35}{20}$

$\frac{26}{20} = 1\frac{3}{5}$ or 1.3

$\frac{45}{100} > \frac{9}{20}$

24. $2.5[6 - (-6)] - \frac{2}{3}(5 + 8)$

$2.5[12] + -\frac{2}{3}(13)$

$30 + \frac{6}{3}$

$30 + 2$

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