Grade 7 to 8

Pre-Algebra 8 and

Supplemental Math

Review Packet Answers

Summer Use

Kuta Software - Infinite Pre-Algebra Name_____

Add/Subtracting Fractions and Mixed Numbers

Date_____ Period____

Evaluate each expression.

1) $\frac{5}{4} - \frac{3}{4} = \frac{5-3}{4} = \frac{2}{4} = \frac{1}{2}$

2) $\frac{3}{2} - \frac{1}{2} = \frac{3-1}{2} = \frac{2}{2} = 1$

3) $\frac{2}{5} + \frac{4}{5} = \frac{2+4}{5} = \frac{6}{5}$ or $1\frac{1}{5}$

4) $\frac{1}{3} - \frac{1}{3} = \frac{1-1}{3} = \frac{0}{3} = 0$

5) $6 - \frac{1}{6} = \frac{6}{1} - \frac{1}{6} = \frac{6 \times 6}{6 \times 6} - \frac{1}{6}$

$= \frac{36}{6} - \frac{1}{6} = \frac{35}{6}$ or $5\frac{5}{6}$

6) $\frac{1}{2} - \frac{1}{2} = \frac{1-1}{2} = \frac{0}{2} = 0$

7) $\frac{1}{5} + \frac{1}{5} = \frac{1+1}{5} = \frac{2}{5}$

8) $\frac{7}{6} - \frac{5}{6} = \frac{7-5}{6} = \frac{2}{6} = \frac{1}{3}$

9) $\left(-\frac{4}{5}\right) - \frac{7}{8} = \frac{-4 \times 8}{5 \times 8} - \frac{7 \times 5}{8 \times 5}$

$= \frac{-32}{40} - \frac{35}{40} = \frac{-32-35}{40} = \frac{-67}{40}$ or $-1\frac{27}{40}$

10) $\frac{1}{3} - \left(-\frac{5}{3}\right) = \frac{1}{3} \ominus \frac{\ominus 5}{3} = \frac{1}{3} + \frac{5}{3}$ (⊖ cancel)

$= \frac{1+5}{3} = \frac{6}{3} = 2$

11) $\left(-\frac{1}{3}\right) + \frac{3}{8} = \frac{-1 \times 8}{3 \times 8} + \frac{3 \times 3}{8 \times 3}$

$= \frac{-8}{24} + \frac{9}{24} = \frac{-8+9}{24} = \frac{1}{24}$

12) $\left(-\frac{10}{7}\right) + \frac{1}{6} = \frac{-10 \times 6}{7 \times 6} + \frac{1 \times 7}{6 \times 7}$

$= \frac{-60}{42} + \frac{7}{42} = \frac{-60+7}{42} = \frac{-53}{42}$ or $-1\frac{11}{42}$

13) $\frac{9}{5} + \left(-\frac{4}{3}\right) = \frac{9 \times 3}{5 \times 3} + \frac{-4 \times 5}{3 \times 5}$

$= \frac{27}{15} + \frac{-20}{15} = \frac{27+-20}{15} = \frac{7}{15}$

14) $2 - \frac{13}{8} = \frac{2}{1} - \frac{13}{8} = \frac{2 \times 8}{1 \times 8} - \frac{13}{8}$

$= \frac{16}{8} - \frac{13}{8} = \frac{16-13}{8} = \frac{3}{8}$

15) $\frac{9}{5}-\frac{5}{8}=\frac{9\times8}{5\times8}-\frac{5\times5}{8\times5}=\frac{72}{40}-\frac{25}{40}$

$=\frac{72-25}{40}=\frac{47}{40}$ or $1\frac{7}{40}$

cancel

16) $\left(-\frac{4}{3}\right)-\left(-\frac{3}{2}\right)=\frac{-4}{3}+\frac{3}{2}=\frac{-4\times2}{3\times2}+\frac{3\times3}{2\times3}$

$=\frac{-8}{6}+\frac{9}{6}=\frac{-8+9}{6}=\frac{1}{6}$

Convert to improper fraction

$-2\frac{2}{5}=\frac{5(-2)-2}{5}$

+ means both are negative

$=\frac{-10-2}{5}=\frac{-12}{5}$

17) $(-1)+\left(-2\frac{2}{5}\right)=\frac{-1}{1}+\frac{-12}{5}=\frac{-1\times5}{1\times5}+\frac{-12}{5}$

$=\frac{-5}{5}+\frac{-12}{5}=\frac{-5+-12}{5}=\frac{-17}{5}$ or $-3\frac{2}{5}$

18) $\left(-3\frac{3}{5}\right)-4\frac{2}{5}=\frac{5(-3)-3}{5}-\frac{5(4)-2}{5}$

$=-\frac{15+3}{5}-\frac{20+2}{5}=\frac{-18}{5}-\frac{22}{5}$

$=\frac{-18-22}{5}=\frac{-40}{5}=-8$

19) $3\frac{6}{7}+\left(-1\frac{1}{7}\right)=3+\frac{6}{7}-1-\frac{1}{7}$

$=3-1+\frac{6}{7}-\frac{1}{7}$

$=2+\frac{6-1}{7}=2+\frac{5}{7}=2\frac{5}{7}$

20) $1\frac{2}{7}+\left(-3\frac{4}{7}\right)=1+\frac{2}{7}-3-\frac{4}{7}$

$=1-3+\frac{2}{7}-\frac{4}{7}=-2+\frac{2-4}{7}$

$=-2+\frac{-2}{7}=-2\frac{2}{7}$

21) $2\frac{1}{3}+\left(-1\frac{2}{3}\right)=2+\frac{1}{3}-1-\frac{2}{3}$

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

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

22) $\left(-1\frac{3}{4}\right)+\left(-3\frac{3}{4}\right)=-1-\frac{3}{4}-3-\frac{3}{4}$

$=-1-3-\frac{3}{4}-\frac{3}{4}=-4-\frac{6}{4}$

$=-4-1\frac{2}{4}=-5\frac{1}{2}$

23) $\left(-1\frac{7}{8}\right)+\left(-3\frac{1}{2}\right)=-\left(\frac{8(1)+7}{8}\right)-\left(\frac{2(3)+1}{2}\right)$

$=-\left(\frac{8+7}{8}\right)-\left(\frac{6+1}{2}\right)=\frac{-15}{8}-\frac{7}{2}=\frac{-15}{8}-\frac{7}{2}\times\frac{4}{4}$

$=\frac{-15}{8}-\frac{28}{8}=\frac{-15-28}{8}=\frac{-43}{8}$ or $-5\frac{3}{8}$

24) $\left(-2\frac{7}{8}\right)+\left(-1\frac{1}{2}\right)=-\left(\frac{8(2)+7}{8}\right)-\frac{2(1)+1}{2}$

$=-\left(\frac{16+7}{8}\right)-\left(\frac{2+1}{2}\right)=\frac{-23}{8}-\frac{3}{2}=\frac{-23}{8}-\frac{3}{2}\times\frac{4}{4}$

$=\frac{-23}{8}-\frac{12}{8}=\frac{-23-12}{8}=\frac{-35}{8}$ or $-4\frac{3}{8}$

25) $\left(-2\frac{5}{6}\right)-\left(-1\frac{1}{4}\right)=-\left(\frac{6(2)+5}{6}\right)+\left(\frac{4(1)+1}{4}\right)$

$=-\left(\frac{12+5}{6}\right)+\left(\frac{4+1}{4}\right)=\frac{-17}{6}+\frac{5}{4}=\frac{-17}{6}\times\frac{2}{2}+\frac{5}{4}\times\frac{3}{3}$

$=\frac{-34}{12}+\frac{15}{12}=\frac{-34+15}{12}=\frac{-19}{12}=-1\frac{7}{12}$

26) $\left(-3\frac{5}{8}\right)-4\frac{2}{5}=-\left(\frac{8(3)+5}{8}\right)-\left(\frac{5(4)+2}{5}\right)$

$=-\left(\frac{24+5}{8}\right)-\left(\frac{20+2}{5}\right)=-\frac{29}{8}-\frac{22}{5}$

$=-\frac{29}{8}\times\frac{5}{5}-\frac{22}{5}\times\frac{8}{8}=\frac{-145}{40}-\frac{176}{40}=\frac{-321}{40}$ or $-8\frac{1}{40}$

27) $1\frac{2}{5}-\left(-3\frac{3}{4}\right)=\left(\frac{5(1)+2}{5}\right)+\left(\frac{4(3)+3}{4}\right)$

$=\frac{5+2}{5}+\frac{12+3}{4}=\frac{7}{5}+\frac{15}{4}=\frac{7}{5}\times\frac{4}{4}+\frac{15}{4}\times\frac{5}{5}$

$=\frac{28}{20}+\frac{75}{20}=\frac{103}{20}$ or $5\frac{3}{20}$

28) $2\frac{4}{5}-\frac{5}{8}=\left(\frac{5(2)+4}{5}\right)-\frac{5}{8}=\frac{10+4}{5}-\frac{5}{8}$

$=\frac{14}{5}-\frac{5}{8}=\frac{14\times8}{5\times8}-\frac{5\times5}{8\times5}=\frac{112}{40}-\frac{25}{40}$

$=\frac{87}{40}$ or $2\frac{7}{40}$

Kuta Software - Infinite Pre-Algebra Name_____

Multiplying/Dividing Fractions and Mixed Numbers Date_____ Period____

Find each product.

1) $-\frac{5}{4} \cdot \frac{1}{3} = \frac{-5}{4} \times \frac{1}{3} = \frac{-5 \times 1}{4 \times 3} = \frac{-5}{12}$

2) $\frac{8}{7} \cdot \frac{7}{10} = \frac{\cancel{8}^{4}}{\cancel{7}_{1}} \times \frac{\cancel{7}^{1}}{\cancel{10}_{5}} = \frac{4 \times 1}{1 \times 5} = \frac{4}{5}$

3) $\frac{4}{9} \cdot \frac{7}{4} = \frac{\cancel{4}^{1}}{9} \times \frac{7}{\cancel{4}_{1}} = \frac{1 \times 7}{9 \times 1} = \frac{7}{9}$

4) $-\frac{2}{3} \cdot \frac{5}{4} = \frac{\cancel{-2}^{-1}}{3} \cdot \frac{5}{\cancel{4}_{2}} = \frac{-1 \times 5}{3 \times 2} = \frac{-5}{6}$

5) $-2 \cdot \frac{3}{7} = \frac{-2}{1} \times \frac{3}{7} = \frac{-2 \times 3}{1 \times 7} = \frac{-6}{7}$

6) $-2\frac{2}{3} \cdot 4\frac{1}{10} = -\left(\frac{3(2)+2}{3}\right) \times \left(\frac{10(4)+1}{10}\right)$

$= -\left(\frac{6+2}{3}\right) \times \left(\frac{40+1}{10}\right) = \frac{-8}{3} \times \frac{41}{10}$

$= \frac{\cancel{-8}^{-4}}{3} \times \frac{41}{\cancel{10}_{5}} = \frac{-4 \times 41}{3 \times 5} = \frac{-164}{5}$ or $-10\frac{14}{15}$

7) $-2\frac{1}{5} \cdot -1\frac{3}{4} = -\left(\frac{5(2)+1}{5}\right) \times -\left(\frac{4(1)+3}{4}\right)$

$= -\left(\frac{10+1}{5}\right) \times -\left(\frac{4+3}{4}\right) = \frac{-11}{5} \times \frac{-7}{4}$

$= \frac{\ominus 11 \times \ominus 7}{5 \times 4} = \frac{77}{20} = 3\frac{17}{20}$

8) $-1\frac{1}{4} \cdot 9 = -\left(\frac{4(1)+1}{4}\right) \times \frac{9}{1} = -\left(\frac{4+1}{4}\right) \times \frac{9}{1}$

$= \frac{-5}{4} \times \frac{9}{1} = \frac{-5 \times 9}{4 \times 1} = \frac{-45}{4}$ or $-11\frac{1}{4}$

9) $-1\frac{5}{7} \cdot -2\frac{1}{2} = -\left(\frac{7(1)+5}{7}\right) \times -\left(\frac{2(2)+1}{2}\right)$

$= -\left(\frac{7+5}{7}\right) \times -\left(\frac{4+1}{2}\right) = \frac{-12}{7} \times \frac{-5}{2}$

$\frac{\cancel{-12}^{-6}}{7} \times \frac{-5}{\cancel{2}_{1}} = \frac{\ominus 6 \times \ominus 5}{7 \times 1} = \frac{30}{7}$ or $4\frac{2}{7}$

10) $-2\frac{3}{8} \cdot 2\frac{1}{2} = -\left(\frac{8(2)+3}{8}\right) \times \left(\frac{2(2)+1}{2}\right)$

$= -\left(\frac{16+3}{8}\right) \times \left(\frac{4+1}{2}\right) = \frac{-19}{8} \times \frac{5}{2}$

$= \frac{-19 \times 5}{8 \times 2} = \frac{-95}{16}$ or $-5\frac{15}{16}$

Find each quotient.

change ÷ to × by taking the reciprocal

11) $\frac{-1}{5} \div \frac{7}{4} = \frac{-1}{5} \div \frac{7}{4} = \frac{-1}{5} \times \frac{4}{7}$

$= \frac{-1}{5} \times \frac{4}{7} = \frac{-1 \times 4}{5 \times 7} = \frac{-4}{35}$

12) $\frac{-1}{2} \div \frac{5}{4} = \frac{-1}{2} \times \frac{4}{5} = \frac{-1}{2} \times \frac{4}{5}$

$= \frac{-1 \times 2}{1 \times 5} = \frac{-2}{5}$

13) $\frac{-3}{2} \div \frac{-10}{7} = \frac{-3}{2} \times \frac{7}{-10} = \frac{-3 \times 7}{2 \times -10}$

$= \frac{-21}{-20} = \frac{21}{20}$ or $1\frac{1}{20}$

14) $\frac{1}{2} \div \frac{8}{7} = \frac{1}{2} \times \frac{7}{8} = \frac{1 \times 7}{2 \times 8} = \frac{7}{16}$

15) $\frac{-9}{5} \div 2 = \frac{-9}{5} \div \frac{2}{1} = \frac{-9}{5} \times \frac{1}{2}$

$= \frac{-9 \times 1}{5 \times 2} = \frac{-9}{10}$

16) $-3\frac{5}{9} \div 3 = -\left(\frac{9(3)+5}{9}\right) \div \frac{3}{1}$

$= -\left(\frac{27+5}{9}\right) \div \frac{3}{1} = \frac{-32}{9} \times \frac{1}{3}$

$= \frac{-32 \times 1}{9 \times 3} = \frac{-32}{27}$ or $-1\frac{5}{27}$

17) $-2 \div -3\frac{4}{5} = \frac{-2}{1} \div -\left(\frac{5(3)+4}{5}\right)$

$= \frac{-2}{1} \div -\left(\frac{15+4}{5}\right) = \frac{-2}{1} \div \frac{-19}{5}$

$= \frac{-2}{1} \times \frac{5}{-19} = \frac{-2 \times 5}{1 \times -19} = \frac{-10}{-19} = \frac{10}{19}$

18) $\frac{1}{9} \div -1\frac{1}{3} = \frac{1}{9} \div -\left(\frac{3(1)+1}{3}\right)$

$= \frac{1}{9} \div -\left(\frac{3+1}{3}\right) = \frac{1}{9} \div \frac{-4}{3}$

$= \frac{1}{9} \times \frac{3}{-4} = \frac{1 \times 3}{9 \times -4} = \frac{3}{-36} = \frac{-1}{12}$

19) $1\frac{6}{7} \div 5\frac{3}{4} = \left(\frac{7(1)+6}{7}\right) \div \left(\frac{4(5)+3}{4}\right)$

$= \frac{7+6}{7} \div \frac{20+3}{4} = \frac{13}{7} \div \frac{23}{4} = \frac{13}{7} \times \frac{4}{23}$

$= \frac{13 \times 4}{7 \times 23} = \frac{52}{161}$

20) $-3\frac{7}{10} \div 2\frac{1}{4} = -\left(\frac{10(3)+7}{10}\right) \div \left(\frac{4(2)+1}{4}\right)$

$= -\left(\frac{30+7}{10}\right) \div \left(\frac{8+1}{4}\right) = \frac{-37}{10} \div \frac{9}{4}$

$= \frac{-37}{10} \times \frac{4}{9} = \frac{-37}{10} \times \frac{4}{9} = \frac{-37 \times 2}{5 \times 9}$

$= \frac{-74}{45}$ or $-1\frac{29}{45}$

Kuta Software - Infinite Pre-Algebra

Name_____

One-Step Equations With Integers

Date_____ Period____

Solve each equation.

1) $v - 10 = -9$

$+10 \quad +10$

$v = 1$

2) $v - 10 = -3$

$+10 \quad +10$

$v = 7$

3) $x - 3 = 4$

$+3 \quad +3$

$x = 7$

4) $\frac{x}{5} = 2 \quad \times 5 \quad \frac{x}{5} = 2 \times 5$

$x = 10$

5) $22 = -11k \rightarrow -11k = 22$

$\div -11 \quad \div -11$

$k = \frac{22}{-11} = -2$

6) $-13m = -377 \quad -13m = -377$

$\div -13 \quad \div -13$

$m = \frac{-377}{-13} = 29$

7) $b - 7 = -1$

$+7 \quad +7$

$b = 6$

8) $-8 = p - 13 \rightarrow p - 13 = -8$

$+13 \quad +13$

$p = 5$

9) $-40 = -5p \rightarrow -5p = -40$

$\div -5 \quad \div -5$

$p = \frac{-40}{-5} = 8$

10) $418 = -22a \rightarrow -22a = 418$

$\div -22 \quad \div -22$

$a = \frac{418}{-22} = -19$

11) $\frac{a}{29} = 5 \rightarrow \times 29 \quad \frac{a}{29} = 5 \times 29$

$a = 145$

12) $-2 = \frac{m}{16} \rightarrow \times 16 \quad \frac{m}{16} = -2 \times 16$

$m = -32$

13) $x - 11 = 16$

$+11 \quad +11$

$x = 27$

14) $-10 = x - 21 \rightarrow x - 21 = -10$

$+21 \quad +21$

$x = 11$

15) $20 = \frac{n}{4}$ → $\times 4 \quad \frac{n}{4} = 20 \times 4$

$n = 80$

16) $n - 29 = -53$

$+29 \quad +29$

$n = -24$

17) $-19 = b - 6$ → $b - 6 = -19$

$+6 \quad +6$

$b = -13$

18) $-8 = -16 + n$ → $n - 16 = -8$

$+16 \quad +16$

$n = 8$

19) $-9 + x = -26$ → $x - 9 = -26$

$+9 \quad +9$

$x = -17$

20) $29 + n = 13$ → $n + 29 = 13$

$-29 \quad -29$

$n = -16$

21) $21 = \frac{x}{18}$ → $\times 18 \quad \frac{x}{18} = 21 \times 18$

$x = 378$

22) $k + 1 = -27$

$-1 \quad -1$

$k = -28$

23) $6 = m - 16$ → $m - 16 = 6$

$+16 \quad +16$

$m = 22$

24) $5 = v + 29$ → $v + 29 = 5$

$-29 \quad -29$

$v = -24$

25) $168 = -84n$ → $-84n = 168$

$\div -84 \quad \div -84$

$n = \frac{168}{-84} = -2$

26) $41k = -2747$ → $41k = -2747$

$\div 41 \quad \div 41$

$k = \frac{-2747}{41} = -67$

27) $\frac{x}{15} = 11$ → $\times 15 \quad \frac{x}{15} = 11 \times 15$

$x = 165$

28) $-71 = \frac{x}{64}$ → $\times 64 \quad \frac{x}{64} = -71 \times 64$

$x = -4544$

71
$\times 64$
284
$+4260$
4544

Kuta Software - Infinite Pre-Algebra

Name_____

Two-Step Equations With Integers

Date_____ Period____

Solve each equation.

1) $\frac{r}{10}+4=5$ → $\frac{r}{10}+4=5$, $-4\ \ -4$, $\times 10\ \frac{r}{10}=1\times 10$, $r=10$

2) $\frac{n}{2}+5=3$ → $\frac{n}{2}+5=3$, $-5\ \ -5$, $\frac{n}{2}=-2$, $\times 2\ \frac{n}{2}=-2\times 2$, $n=-4$

3) $3p-2=-29$, $+2\ \ +2$, $3p=-27$, $\div 3\ \ \div 3$, $p=\frac{-27}{3}=-9$

4) $1-r=-5$, $-1\ \ -1$, $-r=-6$, $\div -1\ \ \div -1$, $r=\frac{-6}{-1}=6$

5) $\frac{k-10}{2}=-7$ → $\times 2\ \frac{k-10}{2}=-7\times 2$, $k-10=-14$, $+10\ \ +10$, $k=-4$

6) $\frac{n-5}{2}=5$ → $\times 2\ \frac{n-5}{2}=5\times 2$, $n-5=10$, $+5\ \ +5$, $n=15$

7) $-9+\frac{n}{4}=-7$, $+9\ \ +9$, $\frac{n}{4}=2$, $\times 4\ \frac{n}{4}=2\times 4$, $n=8$

8) $\frac{9+m}{3}=2$, $\times 3\ \frac{9+m}{3}=2\times 3$, $9+m=6$, $-9\ \ -9$, $m=-3$

9) $\frac{-5+x}{22}=-1$, $\times 22\ \frac{-5+x}{22}=-1\times 22$, $-5+x=-22$, $+5\ \ +5$, $x=-17$

10) $4n-9=-9$, $+9\ \ +9$, $4n=0$, $\div 4\ \ \div 4$, $n=\frac{0}{4}=0$

11) $\frac{x+9}{2}=3$, $\times 2\ \frac{x+9}{2}=3\times 2$, $x+9=6$, $-9\ \ -9$, $x=-3$

12) $\frac{-12+x}{11}=-3$, $\times 11\ \frac{-12+x}{11}=-3\times 11$, $-12+x=-33$, $+12\ \ +12$, $x=-21$

13) $\frac{-4+x}{2}=6$, $\times 2\ \frac{-4+x}{2}=6\times 2$, $-4+x=12$, $+4\ \ +4$, $x=16$

14) $-5+\frac{n}{3}=0$, $+5\ \ +5$, $\frac{n}{3}=5$, $\times 3\ \frac{n}{3}=5\times 3$, $n=15$

15) $\frac{p}{4}+8=7$

$-8 \quad -8$

$\times 4 \quad \frac{p}{4} = -1 \times 4$

$p = -4$

16) $9+\frac{n}{4}=15$

$-9 \quad -9$

$\times 4 \quad \frac{n}{4} = 6 \times 4$

$n = 24$

17) $6+\frac{x}{2}=4$

$-6 \quad -6$

$\times 2 \quad \frac{x}{2} = -2 \times 2$

$x = -4$

18) $\frac{b+11}{3}=-2 \longrightarrow \times 3, \frac{b+11}{3} = -2 \times 3$

$b+11 = -6$

$-11 \quad -11$

$b = -17$

19) $\frac{a-10}{3}=-4$

$\times 3 \quad \frac{a-10}{3} = -4 \times 3$

$a-10 = -12$

$+10 \quad +10$

$a = -2$

20) $-12r+4=100$

$-4 \quad -4$

$-12r = 96$

$\div -12 \quad \div -12$

$r = \frac{96}{-12} = -8$

21) $\frac{m}{16}-9=-8$

$+9 \quad +9$

$\times 16 \quad \frac{m}{16} = 1 \times 16$

$m = 16$

22) $-7+4r=-15$

$+7 \quad +7$

$4r = -8$

$\div 4 \quad \div 4$

$r = \frac{-8}{4} = -2$

23) $\frac{m-13}{2}=-8$

$\times 2 \quad \frac{m-13}{2} = -8 \times 2$

$m-13 = -16$

$+13 \quad +13$

$m = -3$

24) $-5x+13=-17$

$-13 \quad -13$

$-5x = -30$

$\div -5 \quad \div -5$

$x = \frac{-30}{-5} = 6$

25) $\frac{k+10}{-2}=5$

$\times -2 \quad \frac{k+10}{-2} = 5 \times -2$

$k+10 = -10$

$-10 \quad -10$

$k = -20$

26) $\frac{p+8}{-2}=10$

$\times -2 \quad \frac{p+8}{-2} = 10 \times -2$

$p+8 = -20$

$-8 \quad -8$

$p = -28$

27) $-14r-19=303$

$+19 \quad +19$

$-14r = 322$

$\div -14 \quad \div -14$

$r = -23$

28) $\frac{x}{-4}-5=-8$

$+5 \quad +5$

$\times -4 \quad \frac{x}{-4} = -3 \times -4$

$x = 12$

Kuta Software - Infinite Pre-Algebra

Name_____

The Distributive Property

Date_____ Period____

Simplify each expression.

1) $6(1-5m)$ = $1\times6 - 5m\times6$ = $6-30m$

2) $-2(1-5v)$ = $1\times-2 - 5v\times-2$ = $-2+10v$

3) $3(4+3r)$ = $4(3)+3r(3)$ = $12+9r$

4) $3(6r+8)$ = $6r(3)+8(3)$ = $18r+24$

5) $4(8n+2)$ = $8n(4)+2(4)$ = $32n+8$

6) $-(-2-n)$ = $(-1)(-2-n)$ = $-2(-1)-n(-1)$ = $2+n$

7) $-6(7k+11)$ = $7k(-6)+11(-6)$ = $-42k-66$

8) $-3(7n+1)$ = $7n(-3)+1(-3)$ = $-21n-3$

9) $-6(1+11b)$ = $1(-6)+11b(-6)$ = $-6-66b$

10) $-10(a-5)$ = $a(-10)-5(-10)$ = $-10a+50$

11) $-3(1+2v)$ = $1(-3)+2v(-3)$ = $-3-6v$

12) $-4(3x+2)$ = $3x(-4)+2(-4)$ = $-12x-8$

13) $(3-7k)\cdot-2$ = $-2(3-7k)$ = $3(-2)-7k(-2)$ = $-6+14k$

14) $-20(8x+20)$ = $8x(-20)+20(-20)$ = $-160x-400$

15) $(7+19b)\cdot-15$ = $-15(7+19b)$ = $7(-15)+(19b)(15)$ = $-105+-285b$

16) $(x+1)\cdot14$ = $14(x+1$ = $x(14)+1(14)$ = $14x+14$

Kuta Software - Infinite Pre-Algebra

Left to Right

PEMDAS

Name_____

Order of Operations

Date_____ Period____

Evaluate each expression.

1) $(30-3)\div 3$ = $27 \div 3 = 9$

2) $(21-5)\div 8$ = $16 \div 8 = 2$

3) $1+7^2$ = $1+(7\times 7)$ = $1+49 = 50$

4) $5\times 4-8$ = $20-8 = 12$

5) $8+6\times 9$ = $8+54 = 62$

6) $3+17\times 5$ = $3+85 = 88$

7) $7+12\times 11$ = $7+132 = 139$

8) $15+40\div 20$ = $15+2 = 17$

9) $20+16-15$ = $36-15 = 21$

10) $19-15-3$ = $4-3 = 1$

11) $9\times(3+3)\div 6$

$9\times(6)\div 6$

$54\div 6 = 9$

12) $(9+18-3)\div 8$

$(27-3)\div 8$

$24\div 8 = 3$

13) $9+6\div(8-2) = 9+6\div 6$
$= 9+1 = 10$

14) $4(4\div 2+4) = 4(2+4)$
$= 4(6) = 24$

15) $6+(5+8)\times 4$
$= 6+13\times 4$
$= 6+52 = 58$

16) $6\times 6-(7+5)$
$= 6\times 6-(12)$
$= 36-12$
$= 24$

17) $(9\times 2)\div(2+1)$
$= 18\div(2+1)$
$= 18\div 3 = 6$

18) $2-(4+3-6)$
$= 2-(7-6)$
$= 2-(1) = 1$

19) $7\times 7-(8-2)$
$= 7\times 7-6$
$= 49-6 = 43$

20) $9-7-6\div 6$
$= 9-7-1$
$= 2-1 = 1$

21) $(4-1+8\div 8)\times 5$
$= (4-1+1)\times 5$
$= (3+1)\times 5$
$= 4\times 5 = 20$

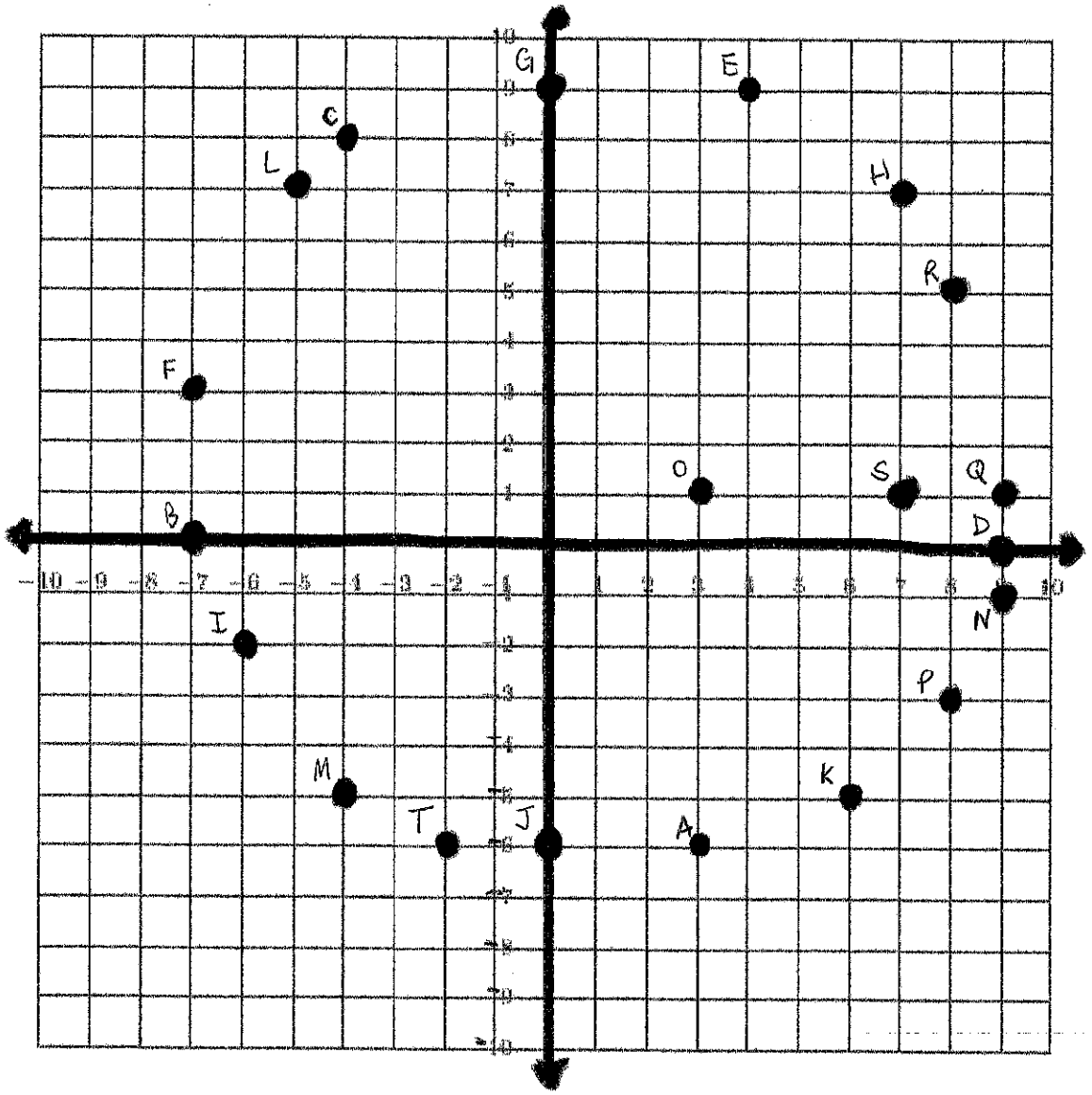
22) $(10\times 2)\div(1+1)$
$= 20\div(1+1)$
$= 20\div 2 = 10$

23) $7\times 9-7-3\times 5$
$= 63-7-3\times 5$
$= 63-7-15$
$= 56-15 = 41$

24) $8-1-(18-2)\div 8$
$= 8-1-16\div 8$
$= 8-1-2$
$= 7-2 = 5$

Plot the Order Pairs

1.



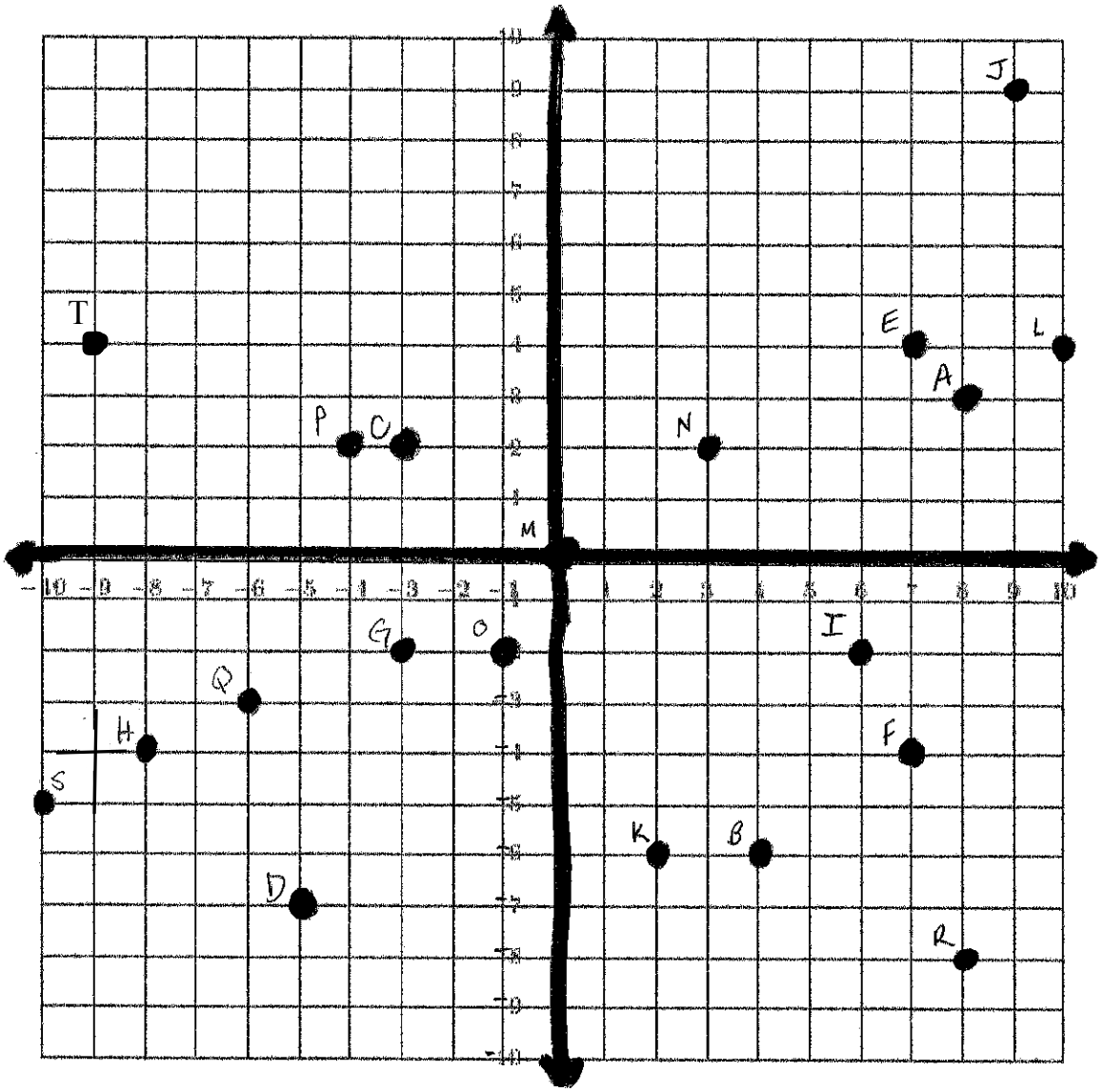
A. (3, −6)
B. (−7,0)
C. (−4,8)
D. (9,0)
E. (4,9)

F. (−7,3)
G. (0,9)
H. (7,7)
I. (−6, −2)
J. (0, −6)

K. (6, −5)
L. (−5,7)
M. (−4, −5)
N. (9, −1)
O. (3,1)

P. (8, −3)
Q. (9,1)
R. (8,5)
S. (7,1)
T. (−2, −6)

2.



A. (8,3)	B. (4,−6)	C. (−3,2)	D. (−5,−7)	E. (7,4)
F. (7,−4)	G. (−3,2)	H. (−8,−4)	I. (6,−2)	J. (9,9)
K. (2,−6)	L. (10,4)	M. (0,0)	N. (3,2)	O. (−1,−2)
P. (−4,2)	Q. (−6,−3)	R. (8,−8)	S. (−10,−5)	T. (−9,4)