

Practice Exercise 4

1. What is the product of $\left(-\frac{3}{5}\right)$ and $\left(-\frac{3}{5}\right)$?
 A. -25 D. $15\frac{3}{5}$
 B. -9 E. 25
C. 9
2. What is the product of (-7), (+5), and (-1)?
 A. -40 D. 13
 B. -35 **E. 35**
 C. -3
3. What is $\left(-\frac{1}{3}\right) \div \left(\frac{5}{9}\right)$? $-\frac{1}{3} \cdot \frac{9}{5} = -\frac{3}{5}$
A. $-\frac{3}{5}$ D. $-1\frac{2}{3}$
 B. $-\frac{5}{18}$ E. $-5\frac{2}{7}$
 C. $-\frac{2}{9}$
4. Barry weighs 20 pounds more than Will. Their combined weight is 370 pounds. How much does each weigh?
will Barry
 $w + (w + 20) = 370$
 $2w + 20 = 370$
 $2w = 350$
 $w = 175$
 A. Barry weighs 185; Will weighs 165.
 B. Barry weighs 204; Will weighs 185.
 C. Barry weighs 175; Will weighs 155.
D. Barry weighs 195; Will weighs 175.
 E. Will weighs 195; Barry weighs 175.
5. If $a = 5$ and $b = 4$, evaluate $10b - 5a$.
 A. 5 D. 30
B. 15 E. 70 $10 \cdot 4 - 5(5) = 40 - 25 = 15$
 C. 25
6. If $e = 8$ and $f = 3$, evaluate $e^2 - f^3$.
 A. 7 D. 49
B. 37 E. 91
 C. 47 $8^2 - 3^3 = 64 - 27 = 37$
7. If $m = 12$ and $n = 4$, evaluate $\frac{2m+8}{n}$.
 A. 1 D. 16
 B. 4 E. 24
C. 8 $\frac{2(12)+8}{4} = \frac{32}{4} = 8$
8. What is the value of xyz^3 if $x = 2$, $y = -2$, and $z = 3$?
 A. -216 D. 96 $2(-2)^3(3)^3$
 B. -72 E. 216 $= 2 \cdot 4 \cdot 9$
C. 72
9. "Five times a number n decreased by 10" can be written as:
 A. $5 - 10n$ D. $10n - 5$ $5n - 10$
 B. $10 - 5n$ E. $50n$
C. $5n - 10$
10. "Five less than 3 times a number n " can be expressed as:
 A. $3n + 5$ **D. $3n - 5$** $3n - 5$
 B. $5 - 3n$ E. $15n$
 C. $5 + 3n$
11. "The sum of 8 and a number n all divided by 5" is
 A. $8 + \frac{n}{5}$ D. $\frac{8n}{5}$ $\frac{8+n}{5}$
 B. $\frac{8}{n} + 5$ **E. $\frac{8+n}{5}$**
 C. $8n + 5$
12. "When 4 times a number n is increased by 5, the result is the same as when 100 is decreased by the number n " can be written as:
 A. $4n - 5 = n + 100$ **D. $4n + 5 = 100 - n$**
 B. $5n + 4 = 100 - n$ E. $5 + 4n = n - 100$
 C. $5n - 4 = n - 100$ $4n + 5 = 100 - n$
13. Simplify $\frac{4r+20}{r+5}$, $r \neq -5$. $\frac{4(r+5)}{r+5}$
 A. $\frac{1}{4}$ D. 8
B. 4 E. $4r + 4$
 C. $3r + 4$
14. A twelve-foot board is cut into two pieces. One piece is three times as long as the other. Find the length of each piece.
 A. 2 and 6 **D. 3 and 9**
 B. 4 and 8 E. 6 and 8
 C. 3 and 6
Small = x $x + 3x = 12$
Long = 3x $4x = 12$
 $x = 3$