



Exercise 1 Translate Algebraic Expressions

Write each as an algebraic expression

1. Add one-third to 5 times k.

$$\frac{1}{3} + 5k$$

$$\frac{1 + 5k}{3}$$

$$\frac{1 + 5}{3}k$$

$$\frac{1 + k}{3}5$$

2. 8 is subtracted from three-fifths of f.

$$\frac{3 + f}{5} - 8$$

$$\frac{3}{5f} - 8$$

$$\frac{3 - f}{5} - 8$$

$$\frac{3}{5}f - 8$$

3. Four-fifths of the sum of n and 4 plus the product of 8 and x.

$$\frac{4}{5}n + 4 + 8x$$

$$\frac{4}{5}(n + 4) + 8x$$

$$\frac{4}{5}n(4 + 8x)$$

$$\frac{4}{5}n + 8x$$

4. Subtract one-fourth from 4 times d.

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

$$4 + d - \frac{1}{4}$$

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

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

5. c is added to 2.

$$c - 2$$

$$c + 2$$

$$2c$$

$$\frac{c}{2}$$

6. One-half of m is added to the product of 9 and y.

$$\frac{m + 9y}{2}$$

$$\frac{m + 9}{2}y$$

$$\frac{m}{2} + 9y$$

$$\frac{1}{2m} + 9y$$

7. 8 is subtracted from h.

$$h - 8$$

$$h + 8$$

$$8h$$

$$\frac{h}{8}$$

8. Subtract 6 from 5 times m.

$$5m + 6 \qquad \frac{5}{m} - 6 \qquad 5 + m - 6 \qquad 5m - 6$$

9. One-half of the sum of 2 and d.

$$\frac{2 - d}{2} \qquad \frac{2 + d}{2} \qquad 2 + \frac{d}{2} \qquad 2 - \frac{d}{2}$$

10. Product of 2 and z.

$$2 + z \qquad 2 - z \qquad 2z \qquad \frac{2}{z}$$
