

Number Practice with Equivalent Expressions.Evaluate the following expressions for the given values of x :

| x | $6x + 4x$ | $2(x-1) - x + 3$ | $(2x)(5x)$ | $(x+1)^2$ |
|---------------|-----------|------------------|------------|-----------|
| 10 | | | | |
| -5 | | | | |
| $\frac{1}{2}$ | | | | |
| 0.1 | | | | |
| 0 | | | | |
| $\frac{3}{5}$ | | | | |

| x | $x+1$ | $x^2 + 2x + 1$ | $10x$ | $10x^2$ |
|---------------|-------|----------------|-------|---------|
| 10 | | | | |
| -5 | | | | |
| $\frac{1}{2}$ | | | | |
| 0.1 | | | | |
| 0 | | | | |
| $\frac{3}{5}$ | | | | |

Which of the above expression give the same answer?

Make the given substitutions for the following equalities. Write both sides of the equality.

$$ab = ba$$

1. $a = x, b = 5$

2. $a = -20, b = 7$

3. $a = -2, b = \pi$

4. $a = 0, b = 100$

5. $a = a + b, b = x$

6. $a = b, b = a$

$$a + b = b + a$$

1. $a = 7, b = 3$

2. $a = -2, b = x$

3. $a = 173, b = 27$

4. $a = x + 3, b = x - 2$

5. $a = ab, b = (a + b)$

6. $a = x, b = y$

$$(ab)c = a(bc)$$

1. $a = 197, b = 5, c = 2$

2. $a = -1, b = 4, c = x$

3. $a = 12, b = \frac{1}{2}, c = 3$

4. $a = \pi, b = -1, c = x^2$

5. $a = a + b, b = a, c = 2$

6. $a = x, b = y, c = z$

$$a(b+c) = ab+ac$$

1. $a = 50, b = 2, c = 7$

2. $a = 50, b = 1, c = .07$

3. $a = P, b = 1, c = .07$

4. $a = 50, b = 1, c = -.15$

5. $a = 2, b = x, c = 1$

6. $a = x, b = x, c = -1$

7. $a = (a+b), b = c, c = d$

8. $a = (x+1), b = x, c = 1$

$$ba+ca = (b+c)a$$

1. $a = x, b = 6, c = 4$

2. $a = -1, b = 3, c = 5$

$$ab+ac = a(b+c)$$

1. $a = 2, b = x, c = 4$

2. $a = x, b = x, c = 5$