

STUDY LINK
9•2

Using the Distributive Property



Reminder: $a * (x + y) = (a * x) + (a * y)$
 $a * (x - y) = (a * x) - (a * y)$

1. Use the distributive property to rewrite each expression.

a. $7 * (3 + 4) = (\underline{\hspace{1cm}} * \underline{\hspace{1cm}}) + (\underline{\hspace{1cm}} * \underline{\hspace{1cm}})$

b. $7 * (3 + \pi) = (\underline{\hspace{1cm}} * \underline{\hspace{1cm}}) + (\underline{\hspace{1cm}} * \underline{\hspace{1cm}})$

c. $7 * (3 + y) = (\underline{\hspace{1cm}} * \underline{\hspace{1cm}}) + (\underline{\hspace{1cm}} * \underline{\hspace{1cm}})$

d. $7 * (3 + (2 * 4)) = (\underline{\hspace{1cm}} * \underline{\hspace{1cm}}) + (\underline{\hspace{1cm}} * (2 * 4))$

e. $7 * (3 + (2 * \pi)) = (\underline{\hspace{1cm}} * \underline{\hspace{1cm}}) + (\underline{\hspace{1cm}} * (2 * \underline{\hspace{1cm}}))$

f. $7 * (3 + (2 * y)) = (\underline{\hspace{1cm}} * \underline{\hspace{1cm}}) + (\underline{\hspace{1cm}} * (\underline{\hspace{1cm}} * \underline{\hspace{1cm}}))$

2. Use the distributive property to solve each problem. Study the first one.

a. $7 * (110 + 25) = (7 * 110) + (7 * 25) = 770 + 175 = 945$

b. $20 * (42 - 19) = \underline{\hspace{3cm}}$

c. $(32 + 50) * 40 = \underline{\hspace{3cm}}$

d. $(90 - 8) * 11 = \underline{\hspace{3cm}}$

e. $9 * (15 + 25) = \underline{\hspace{3cm}}$

3. Circle the statements that are examples of the distributive property.

a. $(80 * 5) + (120 * 5) = (80 + 120) * 5$ b. $6 * (3 - 0.5) = (6 * 3) - 0.5$

c. $12(d - t) = 12d - 12t$ d. $(a + c) * n = a * n + c * n$

e. $(16 + 4m) + 9.7 = 16 + (4m + 9.7)$ f. $(9 * \frac{1}{2}) - (\frac{1}{3} * \frac{1}{2}) = (9 - \frac{1}{3}) * \frac{1}{2}$

Practice

Write each quotient in lowest terms.

4. $\frac{1}{5} \div \frac{1}{15} = \underline{\hspace{2cm}}$

5. $\frac{3}{7} \div \frac{6}{11} = \underline{\hspace{2cm}}$

6. $1\frac{1}{19} \div 7\frac{1}{2} = \underline{\hspace{2cm}}$