

Master 3.23

Extra Practice 6

Lesson 3.6: Order of Operations with Rational Numbers

1. Evaluate.

a) $4.5 + 5.1 \div 1.7$

b) $-5.8 - 3.1 \times 0.5$

2. Evaluate.

a) $\frac{2}{3} \times \left(-\frac{1}{2}\right) + \frac{5}{6}$

b) $\frac{3}{8} - \frac{9}{4} \div \left[\left(-\frac{5}{4}\right) + \left(-\frac{1}{10}\right)\right]$

3. A formula for the area of a trapezoid is $A = a\left(\frac{b+c}{2}\right)$ where b and c are the lengths of the parallel sides and a is the perpendicular distance between these sides. Use the formula to determine the area of a trapezoid with: $a = 3.5$ cm, $b = 5.7$ cm, $c = 8.1$ cm.

4. Evaluate.

a) $-4\frac{2}{3} \div \left[\left(-\frac{1}{3}\right) + 4\frac{1}{6}\right] + \left(-3\frac{2}{5}\right)$

b) $1\frac{5}{9} - \left(-2\frac{1}{6}\right) + \left[4\frac{1}{4} + \left(-3\frac{1}{2}\right)\right]^2 \div \frac{2}{5}$

5. Evaluate this expression. Round the answer to the nearest hundredth.

$$\frac{9.6 \times 12.6 - 5.1 \div (-7.4) - 0.6}{(-2.9) \div 1.3 - (-6.5)}$$