

Review Worksheet for Unit 1 Test

Do on lined paper without a calculator:

1. Evaluate using BEDMAS.

a) $25 - 5 \times 3$ b) $17 - 2(16 \div 4 \times 2)$ c) $(21 \div 7 + 4) \div (11 - 2 \times 2)$ d) $\frac{3 \times (9 - 2) + 8 \div 4 + 2}{6(11 - 8) - (8 + 5)}$

2. Evaluate.

a) $29.01 - 21.14$ b) 2.65×3.7 c) $1.548 \div 0.43$ d) $4.1 + 0.7 \times 3 - 2.8$ e) $(0.2 - 0.02) \div (0.3)^2$

3. Evaluate:

a) $3\frac{1}{4} + 1\frac{3}{8}$ b) $5\frac{1}{4} - 3\frac{2}{3}$ c) $2\frac{1}{2} + 1\frac{2}{3} - \frac{5}{8}$ d) $\frac{3}{8} \times 2\frac{5}{6}$ e) $6\frac{2}{3} \div \frac{4}{5}$

f) $11 \div \frac{5}{8}$ g) $\frac{9}{10} \div 4$ h) $\left(\frac{4}{5}\right)\left(1\frac{1}{9}\right) \div 2\frac{2}{3}$ i) $\frac{5}{6} - 16\left(\frac{3}{4} - \frac{1}{2}\right)^3$

4. Convert to percents.

a) $\frac{7}{20}$ b) $\frac{12}{15}$ c) 0.85 d) 1.2

5. Convert to fractions in lowest terms:

a) 76% b) $6\frac{1}{3}\%$ c) 175% d) 0.15

6. Calculate. a) 20% of 45 b) 300% of 35 7. What percent of 25 is 8?

8. Simplify. a) 11 : 33 : 22 b) 5 min. to 35 s c) 1.9 km to 380 m

9. Evaluate:

a) $-1 - (-7) + 3 + (-18)$ b) $\frac{(-3)(-10)}{(-15)}$ c) $5(-4) - 2(-11)$ d) $2^3 - (2 - 7)^2$

e) $-6^2 - (-8)^2$ f) $\left(\frac{-16}{2}\right) - \left(\frac{14}{-7}\right)$ g) $\frac{30 \div 5(-2)}{1 - 2^2}$ h) $(-3)^3 - (-1)^4$

10. Divide the product of -6 and 8 by the sum of -4 and -8 .

11. Evaluate each expression when $x = -2$, $y = 3$ and $z = -1$.

a) $2x(y - z)$ b) $x^3 - 2xy - z^4$ c) $\sqrt{y^3 - xz}$

***** Answers *****

1. a) 10 b) 1 c) 1 d) 5 2. a) 7.87 b) 9.805 c) 3.6 d) 3.4 e) 2

3. a) $4\frac{5}{8}$ b) $1\frac{7}{12}$ c) $3\frac{13}{24}$ d) $1\frac{1}{16}$ e) $8\frac{1}{3}$ f) $17\frac{3}{5}$ g) $\frac{9}{40}$ h) $\frac{1}{3}$ i) $\frac{7}{12}$

4. a) 35% b) 80% c) 85% d) 120% 5. a) $\frac{19}{25}$ b) $\frac{19}{300}$ c) $1\frac{3}{4}$ d) $\frac{3}{20}$ 6. a) 9 b) 105 7. 32%

8. a) 1:3:2 b) 60:7 c) 95:19 9. a) -9 b) -2 c) 2 d) -17 e) -100 f) -6 g) 4 h) -28

10. 4 11. a) -16 b) 3 c) 5