

Name: _____

Date: _____

adapted from: BLM 1–8

Chapter 1 Practice Test

For #1 to #4, choose the best answer.

1. 0.45 is _____ $\frac{1}{2}$.

A greater than

B less than

C equal to

2. $-3\frac{3}{4}$ is _____ -3.67 .

A greater than

B less than

C equal to

3. $-2.22 \times 3\frac{1}{5}$ is _____ both numbers.

A greater than

B less than

C equal to

4. $\sqrt{5.5 + \left(3\frac{1}{2}\right)} + \left(1.5 - \sqrt{2\frac{1}{4}}\right) \times 2 - 3$ is _____ zero.

A greater than

B less than

C equal to

5. a) State the two whole numbers that $\sqrt{150}$ must lie between. Explain how you know.

b) Without using a calculator, do you think $\sqrt{150}$ is closer in value to the lesser or the greater of the whole numbers that you chose in part a)? Explain how you know.

c) Estimate $\sqrt{150}$ to one decimal place.



6. Evaluate.

a) $\frac{3}{8} + \frac{1}{2}$

b) $\frac{3}{8} - \frac{1}{2}$

c) $\frac{3}{8} \times \frac{1}{2}$

d) $\frac{3}{8} \div \frac{1}{2}$

7. Predict whether each answer is positive or negative. Explain your reasoning. Then, evaluate.

a) $5.3 + (-7.46) + 2.02$

b) $-5\frac{1}{2} \div \frac{-3}{4}$

c) $4.41 - \sqrt{1.69} \times 3$

d) $\left(\frac{3}{2}\right)\left(\frac{-2}{3}\right)$

8. At midnight, the temperature outside is 8°C . The forecast calls for the temperature to drop by 1.5°C per hour.

a) Without using a calculator, do you think the temperature at 4 a.m. will be above or below 0°C ? Explain your reasoning.

b) At what time will the temperature reach 0°C ?

c) If the temperature falls at the same rate, what will the temperature be at 9:30 a.m., to the nearest degree?

9. Calculate.

a) $\sqrt{10.3 + 5.7} \div (-0.5) - (-2 \times 1.5)$

b) $\left(2\frac{1}{3} \times 1\frac{1}{2}\right) - \left(\sqrt{\frac{4}{25}} \div \frac{2}{15}\right)$

1. B 2. B 3. B 4. C

5. a) 12 and 13; 150 is between 12^2 (144) and 13^2 (169).

b) Closer to 12 because 150 is closer to 144 than 169.

c) Answers may vary but should only be one of 12.1 to 12.4. Anything 12.5 or greater is unreasonable.

6. a) $\frac{7}{8}$ b) $-\frac{1}{8}$ c) $\frac{3}{16}$ d) $\frac{3}{4}$

7. a) negative; the two positive numbers add to only 7.32; -0.14

b) positive; dividing one negative number by another gives a positive number; $\frac{22}{3}$

c) positive; $\sqrt{1.69} = 1.3$ and 1.3×3 is only 3.9; 0.51

d) negative; multiplying a positive number by a negative number gives a negative number; -1

8. a) above zero; 4×1.5 °C/h is only a drop of 6 °C.

b) 5:20 a.m. c) -6 °C

9. a) -5 b) $\frac{1}{2}$