Name: _____ Block: _____

1.1 Practice – Square Roots of Perfect Squares

1. Determine the value of each square root <u>without</u> using a calculator.

a) $\sqrt{\frac{100}{49}}$ **b)** $\sqrt{\frac{9}{25}}$ **c)** $\sqrt{\frac{400}{81}}$ **d)** $\sqrt{\frac{8}{98}}$

e) $\sqrt{\frac{49}{121}}$ **f)** $\sqrt{\frac{1}{36}}$ **g)** $\sqrt{\frac{27}{12}}$ **h)** $\sqrt{\frac{4}{16}}$

2. Determine the value of each square root <u>without</u> using a calculator by first changing to a fraction.

a) $\sqrt{0.04}$ **b)** $\sqrt{1.21}$ **c)** $\sqrt{0.0025}$ **d)** $\sqrt{0.64}$

e) $\sqrt{0.0081}$ **f)** $\sqrt{0.01}$ **g)** $\sqrt{0.09}$ **h)** $\sqrt{0.49}$

3. Is each number a perfect square? If so, find its square root <u>without</u> using a calculator.

a) $\frac{25}{121}$ **b)** 6.4 **c)** $\frac{2}{50}$ **d)** 0.004

4. Calculate the number whose square root is: (You can use a calculator).

a) $\frac{5}{7}$ **b)** 1.6 **c)** 0.92 **d)** $\frac{10}{9}$

5. The area of a square garden is 12.25 m^2.

a) Determine the perimeter of the garden.

b) The owner decides to put a gravel pathway around the garden. This reduces the area of the garden by 4.96 m^2. What is the new side length of the garden?

1.1 Practice – Answers

1. **a)** $\frac{10}{7}$ **b)** $\frac{3}{5}$ **c)** $\frac{20}{9}$ **d)** $\frac{2}{7}$ **e)** $\frac{7}{11}$ **f)** $\frac{1}{6}$ **g)** $\frac{3}{2}$ **h)** $\frac{1}{2}$

2. **a)** 0.2 **b)** 1.1 **c)** 0.05 **d)** 0.8 **e)** 0.09 **f)** 0.1 **g)** 0.3 **h)** 0.7

3. **a)** Yes $\frac{5}{11}$ **b)** No **c)** Yes $\frac{1}{5}$ **d)** No

4. **a)** $\frac{25}{49}$ **b)** 2.56 **c)** 0.8464 **d)** $\frac{100}{81}$

5. **a)** 14 m **b)** 2.7 m