Class/ Homework

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Questions:

3abc, 5aceg, 7acegi, 8abcd, 9aceg, 10abcd, 14, 16

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Questions:

7, 9, 10abcd, 17

3.   determine the value of
the square root.

a) $\sqrt{0.25}$

b) $\sqrt{\dfrac{9}{16}}$

c) $\sqrt{\dfrac{16}{25}}$

Try without a calculator

5.

Determine the value of each square root.

Try without a calculator

a) $\sqrt{0.36}$

c) $\sqrt{0.81}$

e) $\sqrt{\dfrac{1}{36}}$

g) $\sqrt{\dfrac{64}{100}}$

7.

Determine the value of each square root.

Try without a calculator

a) $\sqrt{\dfrac{169}{16}}$

c) $\sqrt{\dfrac{256}{361}}$

e) $\sqrt{144}$

g) $\sqrt{0.0121}$

i) $\sqrt{0.0324}$

8. Which decimals and fractions are perfect squares? Explain your reasoning.

a) 0.12   b) 0.81   c) 0.25

Try without a calculator

d) 1.69   e) $\dfrac{9}{12}$ f) $\dfrac{36}{81}$

j) $\dfrac{25}{10}$ k) 2.5   l) $\dfrac{8}{50}$

9. Calculate the number whose square root is:

a) 0.3

c) 1.9

e) $\dfrac{2}{3}$

g) $\dfrac{1}{7}$

10. Determine the value of each square root.

a) $\sqrt{12.25}$ b) $\sqrt{30.25}$

c) $\sqrt{20.25}$ d) $\sqrt{56.25}$

14. A square has area 5.76 cm^2.

   a) What is the side length of the square?

   b) What is the perimeter of the square?
     How do you know?

16. A student said that $\sqrt{0.04} = 0.02$.

Is the student correct?

If your answer is yes, how could you check that the square root is correct?

If your answer is no, what is the correct square root? Justify your answer.

7. Use benchmarks to approximate each square root to the nearest tenth. State the benchmarks you used.

a) $\sqrt{4.5}$

b) $\sqrt{14.5}$

c) $\sqrt{84.5}$

d) $\sqrt{145.5}$

e) $\sqrt{284.5}$

f) $\sqrt{304.5}$

9. Which of the following square roots
are correct to the nearest tenth?
How do you know? Correct the
square roots that are incorrect.

a) $\sqrt{4.4} \doteq 2.2$ b) $\sqrt{0.6} \doteq 0.3$

c) $\sqrt{6.6} \doteq 2.6$ d) $\sqrt{0.4} \doteq 0.2$

10. Find 2 decimals that have square roots
between each pair of numbers.
Justify your answers.
a) 3 and 4

b) 7 and 8

c) 12 and 13

d) 1.5 and 2.5

17. Use a calculator to determine each square root. Which square roots are approximate? How do you know?

a) $\sqrt{52.9}$ b) $\sqrt{5.29}$ c) $\sqrt{2.25}$ d) $\sqrt{22.5}$