## HOMEWORK 21

March 28, 2021
I would like to remind you that the homework should be done on a separate piece of paper. There is not enough space on this handout to show all work. You must show all steps!

1. Find the missing side. Show ALL steps!
a)

b)

d)

e)

g)

h)

i)

j)

2. Apply Pythagorean Theorem to determine if each triangle is a right triangle. Show ALL steps!
a)


37 cm
c)


55 in
d)


15 m
3. To get from point $A$ to point $B$ you must avoid walking through a pond. To avoid the pond, you must walk 34 meters south and 41 meters east. To the nearest meter, how many meters would be saved if it were possible to walk through the pond?

4. A suitcase measures 24 inches long and the diagonal is 30 inches long. How much material is needed to cover on side of the suitcase?

5. Solve for $x$. Do not use a calculator!!! Show ALL steps!

$$
\frac{\left(4.5 \cdot 1 \frac{2}{3}-6.75\right) \cdot \frac{2}{3}}{\left(3 \frac{1}{3} \cdot 0.3+5 \frac{1}{3} \cdot \frac{1}{8}\right) \div 2 \frac{2}{3}}+\frac{1 \frac{4}{11} \cdot 0.22 \div 0.3-0.96}{\left(0.2-\frac{3}{40}\right) \cdot 1.6}=
$$

