## HOMEWORK 23

April 18, 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. Rationalize the denominator:
a) $\frac{5}{\sqrt{5}}=$
b) $\frac{2}{\sqrt{7}}=$
d) $\frac{4}{\sqrt{6}}=$
e) $\frac{6}{\sqrt{2}}=$
2. Find the perimeter and the area of each figure below. Round you answer to the nearest tenth.
a)

c)

b)
3. The recommended angle for a firefighting ladder is $75^{\circ}$. When a 110 -foot ladder is put up against a building at this angle, the base of the ladder is about 28 feet from the building. The base of the ladder is 8 feet above the ground. How on the building will the ladder reach? Round your answer to the nearest tenth.

4. A baseball player throws a ball from second base to home plate. How far does the player throw the ball?
5. This toy is a series of isosceles triangles. If $\mathrm{AB}=2$, find $\mathrm{AC}, \mathrm{BC}, \mathrm{CD}, \mathrm{CF}, \mathrm{BD}, \mathrm{DE}, \mathrm{EF}$, and DF .

