## 7.G.2: Worksheet

1. Draw a triangle with side lengths of 3 in, 5 in, and 3 in. Is your answer a unique triangle? Answer should be an isosceles triangle; yes, it's unique.
2. Draw a quadrilateral with only one set of parallel sides and no right angles. Answer should resemble a trapezoid.
3. Draw a triangle with one right angle and one side that's 12 cm long. Is your answer a unique triangle? Answer should be a right triangle. No, it's not unique - the 12 cm side can be any of the three.
4. Can a triangle have three acute angles? If so, draw an example. Yep!

5. Can a triangle have two right angles? If so, draw
an example. Nope, that's impossible.
6. Can a triangle have one obtuse angle and two acute angles? If so, draw an example. It can indeed.

7. Is it possible to draw a triangle with side lengths of 10 in, 5 in, and 4 in? No, it's impossible.
8. Draw a parallelogram with one $50^{\circ}$ angle and one $130^{\circ}$ angle. Answer should have two opposite $50^{\circ}$ angles and two opposite $130^{\circ}$ angles.
9. Is it possible to draw an equilateral triangle whose angles are all $60^{\circ}$ ? Yes, it is.
10. Draw a triangle with side lengths of $12 \mathrm{~cm}, 13 \mathrm{~cm}$, and 10 cm . Answer should be an acute scalene triangle.
