**2.6** Name_____-

**1. For the conditional statement "If I exercise then I will stay fit", find the following:**

**Inverse**

**Contrapositive**

**Converse**

**2. Simplify** $\sqrt{72}$ $(2\sqrt{7})^2$ $\sqrt{64} + 3\sqrt{25}$

**3. Name the 5 parts of a proof in order.**

1.
2.
3.
4.
5.

**4. Write the reasons for the following equation.**

| | |
|---|---|
| -3(x+5) = 4x-10 | _____ |
| -3(x) -3(5) = 4x-10 | _____ |
| -3x – 15 = 4x-10 | _____ |
| -3x – 15 + 3x = 4x – 10 + 3x | _____ |
| -15 = 7x – 10 | _____ |
| -15 + 10 = 7x – 10 + 10 | _____ |
| -5 = 7x | _____ |
| -5/7 = 7x/7 | _____ |
| -5/7 = x | _____ |
| x = -5/7 | _____ |

**5. Name the property being shown**

**a. AB=AB**

**b. If x=4 then x+7 = 4+7**

**c. If 10= 5+5 then 5+5 = 10**

**d. If x = 4 then 3x = 3(4)**

**6. Draw a line that is 2 and 5/16 inches long.** **Draw an angle that measures 55 degrees.**

7. What is the intersection of line m and line n?

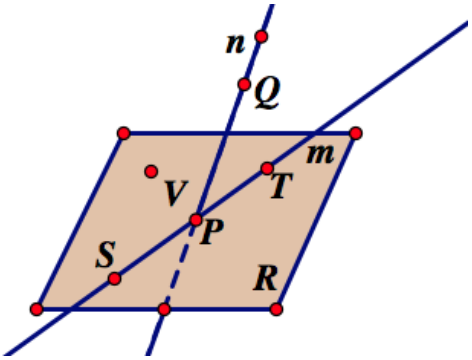
Name the plane using three letters.

Name three collinear points.

Name three noncollinear points.

Name the plane without using points.

Which line is contained in the plane?

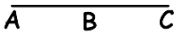



8. If the diagonal of a square is 11 cm, find the measure of each side of the square. Draw and label the picture. Round to the nearest tenth.

9. Two angles form a linear pair and one angle is 3/5 of the other angle. Find the measure of the two angles. SHOW WORK!

11. Take the proof shown below and write it as a paragraph proof. There should be at least four sentences in your paragraph.

Given AC=AB+AB
Prove AB=BC




| Statements | Reasons |
|---|---|
| 1. AC=AB+AB | 1. Given |
| 2. AB+BC=AC | 2. Segment Addition Postulate |
| 3. AB+AB=AB+BC | 3. Transitive Property |
| 4. AB=BC | 4. Subtraction Property |