

## CH 2 Quiz Review Worksheet

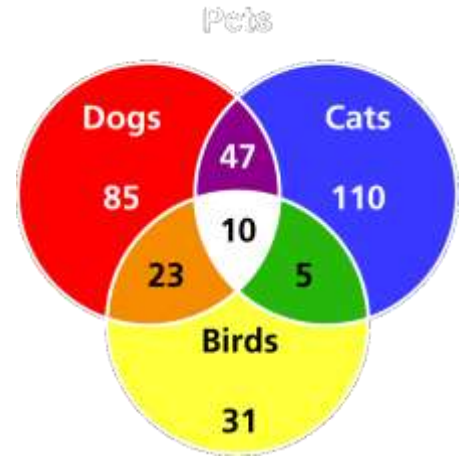
1. 1, -3, 5, -7, 9, \_\_\_\_\_
2. 100, 90, 70, 40, \_\_\_\_\_
3. 3, 6, 9, 12, \_\_\_\_\_
4. 100, 50, 25, 12.5, \_\_\_\_\_

### Numbers

1. How many people own Dogs and Cats?

2. How many people own dogs and birds, but no cats

3. How many people own just cats?



### Symbols

| P | Q | R | $P \vee Q$ | $Q \wedge R$ | $(P \vee Q) \vee (Q \wedge R)$ |
|---|---|---|------------|--------------|--------------------------------|
| T | T | T |            | T            |                                |
| T | T | F | T          |              | T                              |
| T | F | T |            | F            |                                |
| T | F | F | T          |              | T                              |
| F | T | T |            | T            |                                |
| F | T | F | T          |              | T                              |
| F | F | T |            | F            |                                |
| F | F | F | F          |              | F                              |

4. Law of Detachment \_\_\_\_\_ number of if thens

5. Law of Syllogism \_\_\_\_\_ number of if thens

6. Inductive Reasoning                      Deductive Reasoning

| Statement           | Reason   |
|---------------------|----------|
| $4x - 14 = 2x + 16$ | Given    |
|                     |          |
|                     |          |
|                     |          |
|                     |          |
|                     |          |
| $x = 15$            | Simplify |

| Statement           | Reason                     |
|---------------------|----------------------------|
| $AB \cong DE$       |                            |
| $AB = DE$           | Congruence Definition      |
|                     | Given                      |
| $BC = EF$           |                            |
| $AB + BC = DE + EF$ | Addition                   |
| $AB + BC = AC$      | Segment Addition Postulate |
| $DE + EF = DF$      |                            |
| $AC = DF$           | Substitution               |
|                     | Congruence Definition      |

| Statement                                       | Reason                  |
|---|-------------------------|
| $\angle 1$ and $\angle 3$ are vertical angles   | Given                   |
| $\angle 1 \cong \angle 3$                       | Vertical Angles Theorem |
|   | Congruence Definition   |
| $m\angle 1 + m\angle 2 = 180$                   | Supplement Theorem      |
| $m\angle 1 + m\angle 4 = 180$                   |                         |
| $m\angle 1 + m\angle 2 = m\angle 1 + m\angle 4$ | Transitive POE          |
| $-m\angle 1 = -m\angle 1$                       |                         |
| $m\angle 2 = m\angle 4$                         |                         |
| $\angle 2 \cong \angle 4$                       |                         |

| Statement           | Reason                            |
|---------------------|-----------------------------------|
| $AD \cong BE$       | Given                             |
|                     | Definition of Congruence          |
| $AD = AB + BD$      |                                   |
| $BE = BD + DE$      |                                   |
| $AB + BD = BD + DE$ | Substitution (lines 3 & 4 into 2) |
|                     | Subtraction                       |
| $AB = DE$           | Simplify                          |
| $AB \cong DE$       |                                   |