Name: _Key_ _____ Date: _____

**1. In the following questions:**
- **Describe the set in words,**
- **Write down two more elements in the set.**

a) {Asia, Africa, Europe, …} *North America, South America*

b) {2, 4, 6, 8, …} *10, 12*

c) {Sunday, Monday, Tuesday, …} *Wednesday, Thursday*

d) {1, 4, 9, 16, …} *25, 36*
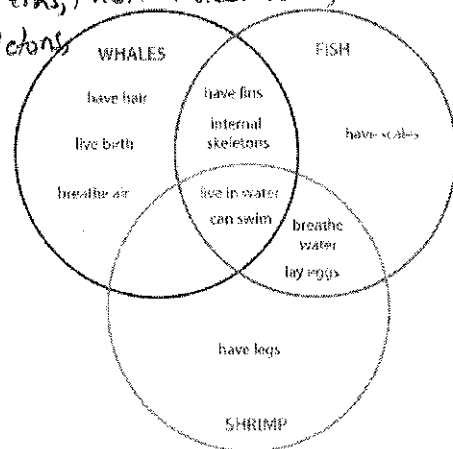
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**2. Set A = {whole numbers between 60 and 90}**

a) List the subset B {multiples of 5} *{60, 65, 70, 75, 80, 85, 90}*

b) List the subset C {multiples of 3} *{60, 63, 66, 69, 72, 75, 78, 81, 84, 87, 90}*

c) List the subset D {perfect squares} *{64, 81}*

d) List the elements that are in both subsets B and C. *{60, 75, 90}*

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**3. State whether each of the following statements is true or false.**

a) {Algeria, Mozambique} ⊂ {Countries in Africa} *Yes*

b) {mango, banana} ⊂ {fruit} *Yes*

c) {volleyball, basketball, football, golf} ⊂ {team sports} *No*

d) {potatoes, ~~carrots~~} ⊂ {vegetables} *Yes*

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**4. List the elements of each subset of characteristics for sea creatures.**

a) Subset W = *{have hair, live birth, breathe air, have fins, internal skeletons, live in water, can swim}*

b) Subset F = *{have scales, breathe water, lay eggs, fins, skeletons, live in water, can swim}*

c) Subset S = *{have legs, breather water, lay eggs, live in water, can swim}*

d) What elements are in subsets F and S?
   *{live in water, can swim, breathe water, lay eggs}*

e) What elements are common to all 3 subsets?
   *{live in water, can swim}*

**5. List the elements of each subset of animals**

a) Subset {Can Swim}= human, turtles}
ffish, sharks, whales, jellyfish, ducks, shrim, dogs,

b) Subset {Have Fins} =
{ fish, sharks, whales}

c) Subset {Breath Air} =      chickadees}
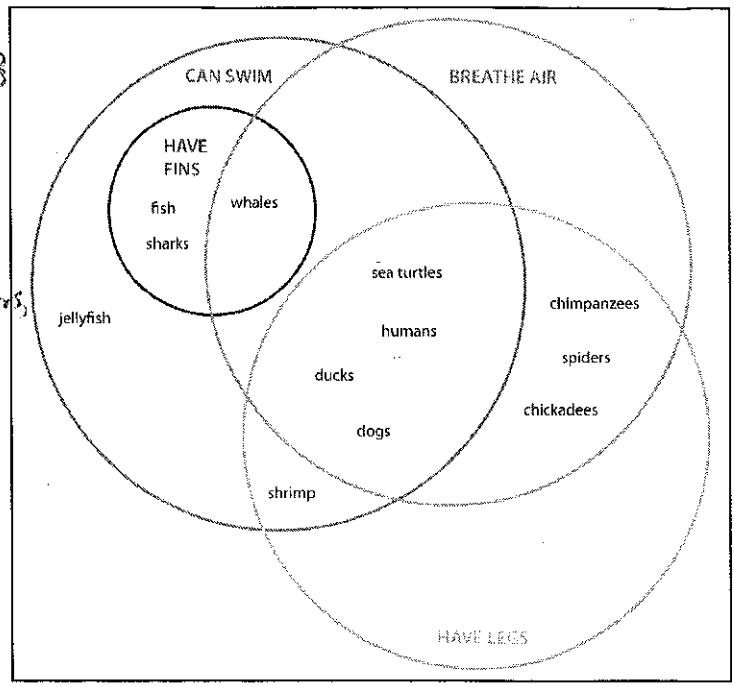{turtles, humans, ducks, dogs whales, chimps, spiders,

d) Is {can swim} ⊂ {have fins}? No

e) Is {have fins} ⊂ {can swim}? Yes

f) Is {have fins} ⊂ {breath air}? No

g) What elements ~~animals~~ are in both {can swim} and {breath air}?
{whales, turtles, humans, ducks, dogs}

h) ~~What animals~~ are in {can swim} or {breath air}? 12
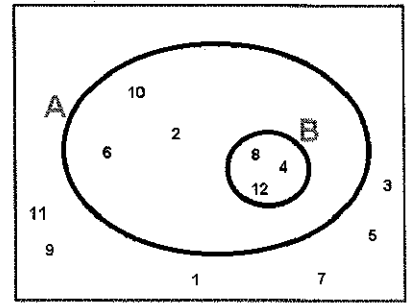How many elements



**6. The whole numbers from 1 to 12 are included in the Venn diagram below.**

a) List the elements of subset {A} {2, 4, 6, 8, 10, 12}

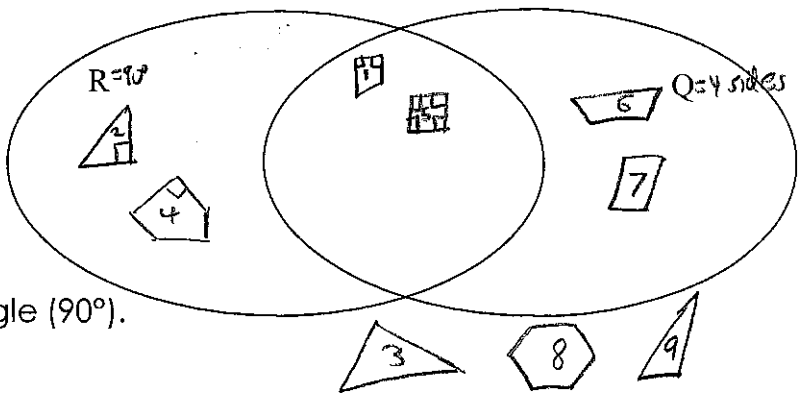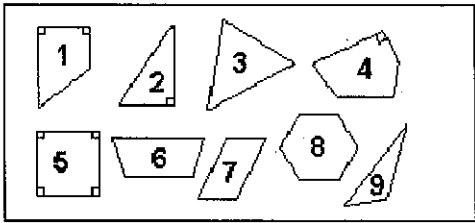b) List the elements of subset {B} {4, 8, 12}

c) Is {A} ⊂ {B}? No

d) Is {B} ⊂ {A}? Yes



**7. Complete the Venn diagram using the below information.**



Set R contains shapes with a right angle (90°).
Set Q contains shapes with four sides.