NAME: _____ PER: _____

Why Is a Mathematician Like an Airline?

Round each answer to the nearest hundredth (if necessary) and find it in the appropriate answer column. Use 3.14 for π. Fill in the correct unit of measure for each answer you choose. Write the letter of the exercise in the box containing the number of the answer.

$A = \pi r^2$
$C = 2\pi r$

1. A circle has a radius of 12 in. Find:
   - (E) The diameter of the circle.
   - (H) The circumference of the circle.
   - (T) The area of the circle.
2. A circle has a radius of 4.4 cm. Find:
   - (S) The diameter of the circle.
   - (Y) The circumference of the circle.
   - (H) The area of the circle.
3. A circle has a diameter of 60 m. Find:
   - (I) The radius of the circle.
   - (O) The circumference of the circle.
   - (T) The area of the circle.
4. A circle has a diameter of 1.8 km. Find:
   - (O) The radius of the circle.
   - (E) The circumference of the circle.
   - (U) The area of the circle.
5. Solve.
   - (B) Jack's cow is tied to a beanstalk with a piece of rope that is 15 ft long. What is the area of the circle in which the cow can graze?
   - (T) A round game table has a diameter of 1 m. How much plastic laminate is needed to cover the top of this table?
   - (S) The diameter of the earth at the equator is about 8,000 mi. Based on this figure, how far is it around the earth?
   - (P) Radio station KROQ broadcasts in all directions to a distance of 40 mi. How many square miles are in the station's broadcast area?
   - (L) WORLD RECORD: The world's largest Ferris Wheel was built in London in 1897. The wheel had a radius of 150 ft. How far would you travel in one turn of this wheel?

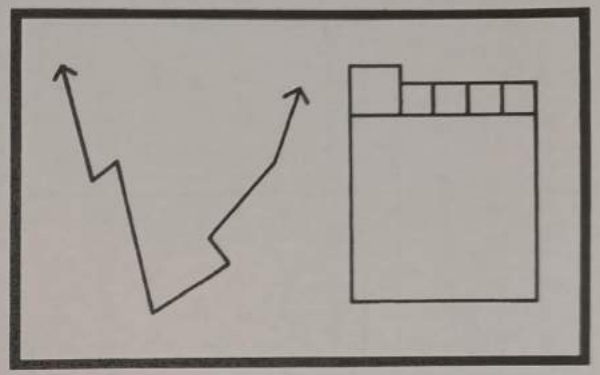
Answers 1 – 3:	
(4)	27.63
(14)	61.43
(16)	30
(2)	75.36
(12)	461.36
(21)	8.8
(17)	172.4
(13)	24
(9)	60.79
(1)	2,826
(8)	452.16
(5)	25.51
(7)	188.4
(10)	2,516

Answers 4 – 5:	
(15)	898
(6)	706.5
(13)	5,174
(5)	24,930
(11)	2.54
(20)	0.79
(19)	0.9
(18)	942
(10)	690.5
(14)	2.91
(15)	5,024
(3)	5.65
(17)	0.87
(12)	25,120

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

* Show your work on a separate page! *

What Is the Title of This Picture?



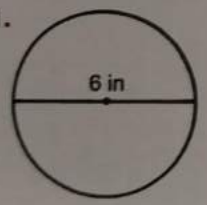
Use the diameter (***d***) or radius (***r***) of each circle to find the circumference (***C***) and area (***A***) of the circle. Use 3.14 for π. Round answers to the nearest hundredth (if necessary). Each time an answer appears in the coded title, write the letter of the exercise above it.

*Show your work on a separate page! *

CODED TITLE:

5,024	176.63	0.7	40	1,017.36	0.7	5.2	4,954	18.84	47.1	3	113.04	0.7	1.69	5,024	28.26	4.40	21.23
16.33	47.1	0.7	172.38	36	1.54	251.2	18.84	176.63	0.7	984.46	15	16.33	16.33	4.40			

1.

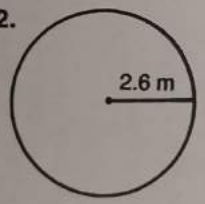


(G) $r =$ _____ in.

(A) $C =$ _____ in.

(I) $A =$ _____ $in.^2$

2.



(D) $d =$ _____ m

(O) $C =$ _____ m

(H) $A =$ _____ m^2

3. $d = 80$ ft

(C) $r =$ _____ ft

(U) $C =$ _____ ft

(W) $A =$ _____ ft^2

4. $r = 18$ in.

(S) $d =$ _____ in.

(L) $C =$ _____ in.

(K) $A =$ _____ $in.^2$

5. $d = 1.4$ cm

(E) $r =$ _____ cm

(T) $C =$ _____ cm

(Q) $A =$ _____ cm^2

6. $r = 7.5$ mm

(F) $d =$ _____ mm

(N) $C =$ _____ mm

(R) $A =$ _____ mm^2