DAFFYNITION DECODER

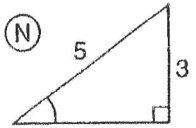
EUROPE:

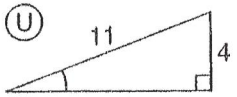
30°	42°	21°	24°	74°	2°	21°	24°	37°	49°	2°	42°	17°	32°	5°	2°

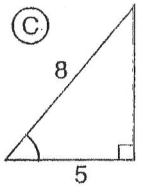
UNDERGROUND GARAGE:

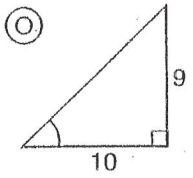
46°	5°	9°	9°	28°	2°	42°	7°	46°	5°	9°	9°	7°	51°	5°	24°	68°	34°	2°

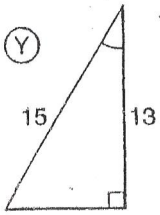
TO DECODE THE TWO DAFFYNITIONS ABOVE: For the first nine exercises, find the measure of the angle indicated. For the remaining exercises, find the angle measure needed to solve the problem. Round to the nearest degree. Each time the answer appears in the code, write the letter of the exercise below it.

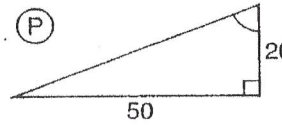
(N) 

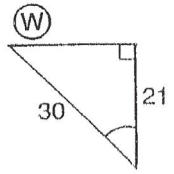
(U) 

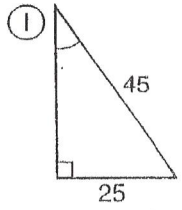
(C) 

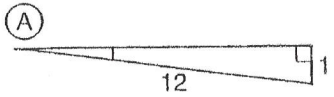
(O) 

(Y) 

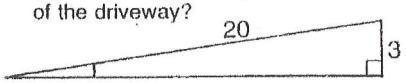
(P) 

(W) 

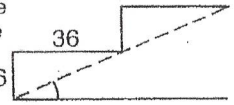
(I) 

(A) 

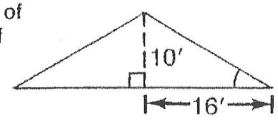
(L) A driveway is built on an incline so that it rises 3 m over a distance of 20 m. What is the angle of elevation of the driveway?



(R) Each step of a stairway rises 16 cm for a tread width of 36 cm. What angle does the stairway make with the floor?



(B) A roof is constructed as shown in the diagram. Find the pitch (angle of elevation) of the roof.

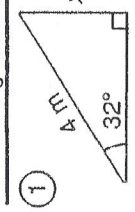


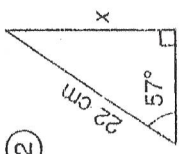
(T) A train decreases its altitude by 8 m when traveling along 200 m of track. Find the angle of depression of the track.

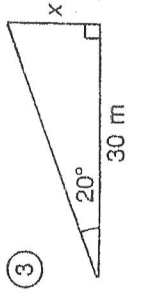
OBJECTIVE 5–d: To use trigonometric ratios to find measures of angles of right triangles.

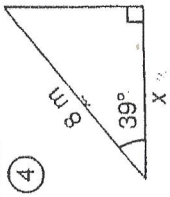
What Do They Call the Big Grass Field on an Orbiting Satellite?

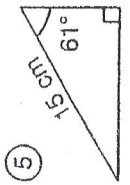
For the first eight exercises, find the length x. For the remaining exercises, find the length needed to solve the problem. Round each answer to the nearest tenth. Cross out each box that contains a correct answer. When you finish, write the letters from the remaining boxes in the spaces at the bottom of the page.

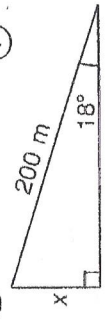
(1) 

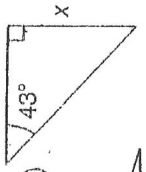
(2) 

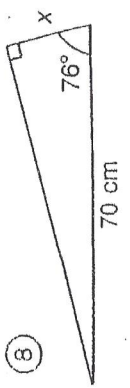
(3) 

(4) 

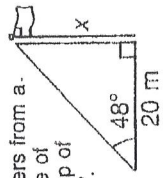
(5) 

(6) 

(7) 

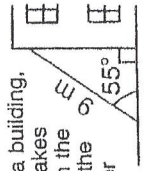
(8) 

(9) At a point 20 meters from a flagpole, the angle of elevation of the top of the flagpole is 48°. How tall is the flagpole?



(10) If a rocket flies 2° off course for 1000 miles, how far from the correct path will the rocket be?

(11) As it leans against a building, a 9-meter ladder makes an angle of 55° with the ground. How far is the bottom of the ladder from the base of the building?



TH	4.7 m	AP	5.4 m	ET	5.2 m	E	2.1 m	AR	23.5 m	UP	34.9 mi	UN	6.2 m	A	15.3 cm	SS	61.8 m
RU	18.5 cm	NS	3.2 m	TO	7.3 cm	P	63.6 m	A	22.2 m	KY	10.9 m	KI	28.7 mi	NI	16.9 cm	CE	17.1 cm

OBJECTIVE 5–c: To use trigonometric ratios to find lengths of sides of right triangles.

