Mathematics

Power Standard 8:4

Pre-Formative Test

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_\_\_\_

1. A triangle with 2 sides congruent is called:
2. Equilateral
3. Isosceles
4. Right
5. Scalene
6. A parallelogram with 4 congruent sides, but not containing 4 right angles is called:
7. Rhombus
8. Square
9. Rectangle
10. Trapezoid
11. Compare a square with a parallelogram. Needs answer box
12. Compare a right isosceles triangle with a right scalene triangle. Needs answer box
13. Triangle ABC is similar to triangle DEF. Identify the true statement about these 2 triangles.
14. Side AB has the same measure as side DE
15. Side AB corresponds to side DE
16. Angle B is congruent to angle F
17. Angle B and angle F are right angles
18. Quadrilateral ABCD is similar to quadrilateral EFGH. Identify the true statement about these 2 quadrilaterals.
19. Quadrilateral ABCD is a rectangle.
20. Quadrilateral EFGH is a parallelogram.
21. Angle C is congruent to angle G.
22. Side AB has the same measure as side EF
23. A 36-foot tree casts a 9-foot shadow at the same time a building casts an 18-foot shadow. How all is the building?
24. 9 feet
25. 18 feet
26. 4.5 feet
27. 72 feet
28. The scale factor on a map is 3 centimeters = 10 kilometers. What is the actual distance if the distance on a map is 12 cm?
29. 19 kilometers
30. 40 miles
31. 40 kilometers
32. 3.6 kilometers
33. On an architect’s blueprint, the dimensions of a room are 4 inches by 7 inches. If the actual dimensions of a room are 12 feet by 21 feet, what is the scale of the blueprint?
34. 1 inch = 3 feet
35. 1 inch = 7 inches
36. 7 inches = 2 feet
37. 12 feet = 21 feet
38. Suppose two rectangles are similar with a scale factor of 3. What is the ratio of their areas?
39. 1:3
40. 1:6
41. 1:2
42. 1:9
43. Suppose the ratio between the corresponding sides of two similar rectangles is 1:2. If the area of the smaller rectangle is 5 square inches, what is the area of the larger rectangle? Needs answer box
44. Suppose 2 triangles are similar with a scale factor of 4. What is ratio of their areas? Explain. Needs answer box