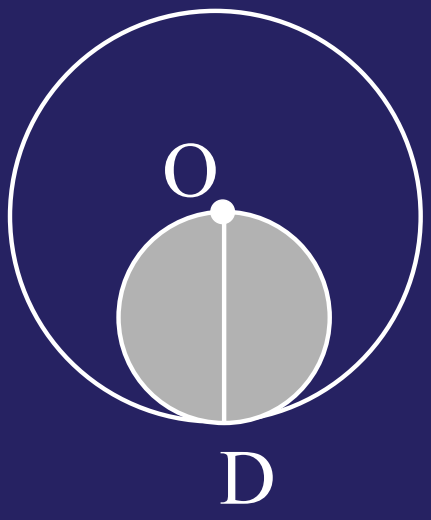
31. A piece of yarn is 60 cm long. The yarn is cut so that one piece is five times the length of the other piece. How many centimeters long is the shorter piece?

Answer: 10 (centimeters)

32. The larger circle has center O and passes through D. The smaller circle has diameter OD. What percent of the larger circle's area is gray?



Answer: 25 (percent)

33. Sally found that one dozen eggs costs $1.20 at Super-X. However, she could get 2.5 dozen of the same eggs at Limitless for $3.15. When buying 5 dozen eggs, how many cents would she save by shopping at the less expensive store?

Answer: 30 (cents)

34. What is the greatest number of distinct positive integer factors that a positive integer less than 20 can have?

Answer: 6 (factors)

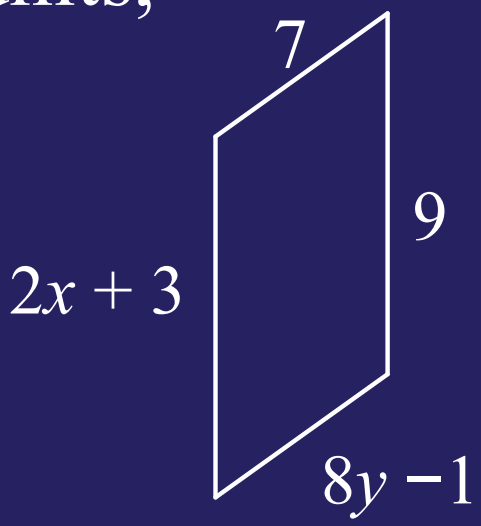
35. Uri buys two burgers and a soda for $2.10, and Gen buys a burger and two sodas for $2.40. How many cents does a soda cost?

Answer: 90 (cents)

36. Bill travels the 400 miles from San Francisco to Los Angeles at 50 mi/h. Sam travels the same distance at 40 mi/h. How many more hours than Bill did it take Sam to travel the 400 miles?

Answer: 2 (hours)

37. The sides of this parallelogram measure 7, 9, $8y - 1$ and $2x + 3$ units, consecutively. What is the value of $x + y$?



Answer: 4

38. If $a^2 = 6$ and $a^4 = 4b^3$ and a and b are positive, what is the simplified value of a^2b^3?

Answer: 54

39. The sum of a positive number and its square is 156. What is the number?

Answer: 12

40. An ice cream shop offers three toppings. If a customer's order may include none, one, two or all of the toppings, how many combinations of the toppings can a customer choose?

Answer: 8 (combinations)