

1. Simplify the expressions:

a. $3^2 + 3^2 + 3^2$; b. $3^k + 3^k + 3^k$; c. $3^k \cdot 3^k \cdot 3^k$;

2. What will be last digit of

a. 2^{22} ; b. 2022^{22} ;

3. Reduce the fractions

a. $\frac{49^4 \cdot 7^5}{7^{12}}$; b. $\frac{3^{10} \cdot 27}{81^3}$; c. $\frac{125^3 \cdot 5^7}{5^{18}}$;

4. Houses of Winnie the Pooh and Piglet are on the same street, 600 meters apart. At the same time, they started moving in opposite directions. Pooh was walking with a speed of 3 km/h, and Piglet was running with a speed of 6 km/h. How far from each other will they be in 20 minutes?

5. Come up with the word problems corresponding to the pictures below and solve them:

