

Name \_\_\_\_\_

## Power of Products

Tick the correct option from the following.

1) Which of the following equals  $8^{14} \cdot 9^{14}$

(i)  $(-72)^{14}$   (ii)  $72^{14}$   (iii)  $89^{14}$

2) Which of the following equals  $(-3)^4 \cdot 9^4$

(i)  $(-27)^4$   (ii)  $27^{14}$   (iii)  $(-27)^{16}$

3) Which of the following equals  $(-2)^5 \cdot (-9)^5$

(i)  $(-18)^5$   (ii)  $18^5$   (iii)  $(18)^{-5}$

4) The value of  $x$ , if  $x^2 \cdot (-3y)^2 = (6yz)^2$

(i)  $(2z)$   (ii)  $(yz)$   (iii)  $(-2z)$

5) The value of  $x$ , if  $(x)^5 \cdot (-6b)^5 = (-24ab)^5$

(i)  $(4a)$   (ii)  $(-4b)$   (iii)  $(-4ab)$

6) The value of  $x$ , if  $(-6y)^{-2} \cdot x^{-2} = (36yz)^{-2}$

(i)  $(-6)$   (ii)  $(-z)$   (iii)  $(-6z)$