Check Your Understanding
Fill in the missing parts

Answers for Facilitators

2^7	2 to the 7th power	2•2•2•2•2•2•2	128
5^4	5 to the 4th power	5•5•5•5	625
$(ab)^3$	the quantity ab cubed	(ab)(ab)(ab)	a^3b^3
11^2	11 squared	11•11	121
$(a^3b^4)^5$	the quantity a cubed b to the 4th power to the 5th power	(a^3b^4) (a^3b^4) (a^3b^4) (a^3b^4) (a^3b^4)	a^{15} b^{20}
$(3xy)^8$	the quantity 3xy to the 8th power	(3xy) (3xy) (3xy) (3xy) (3xy) (3xy) (3xy) (3xy)	$3^8x^8y^8$
$\frac{8x^3y^5}{4xy^2}$	the quotient of the quantity 8x cubed y to the 5th power and 4xy squared	$\frac{2 \cdot 2 \cdot 2xxxyyyyy}{2 \cdot 2xyy}$	$2x^2y^3$
$(5)^{-2}$	5 to the negative 2 power	$\frac{1}{5 \cdot 5}$	$\frac{1}{25}$

Check your Understanding
Part 2
Facilitator Answer Key

1. Explain how 9 and 81 are related.

   9 is the square root of 81 and 81 is the square of 9.

2. Without a calculator, identify the two integers between its square root lies, and explain why.

   a)

   $\sqrt{30}$

   $\sqrt{25} < \sqrt{30} < \sqrt{36}$

   $5 < \sqrt{30} < 6$

   b)

   $\sqrt{72}$

   $\sqrt{64} < \sqrt{72} < \sqrt{81}$

   $8 < \sqrt{72} < 9$

   c)

   $\sqrt{12}$

   $\sqrt{9} < \sqrt{12} < \sqrt{16}$

   $3 < \sqrt{12} < 4$