

This documentation was generated from the Python documentation available by typing `help(int)` in the Python shell. In this documentation the variables `x`, `y`, and `z` refer to integers (Table 8.1).

**Table 8.1** Integer operators

Operator	Returns	Comments
<code>x + y</code>	int	Returns the sum of <code>x</code> and <code>y</code>
<code>x - y</code>	int	Returns the difference of <code>x</code> and <code>y</code>
<code>x*y</code>	int	Returns the product of <code>x</code> and <code>y</code>
<code>x/y</code>	float	Returns the quotient of <code>x</code> divided by <code>y</code>
<code>x//y</code>	int	Returns the integer quotient of <code>x</code> divided by <code>y</code>
<code>x % y</code>	int	Returns <code>x</code> modulo <code>y</code> . This is the remainder of dividing <code>x</code> by <code>y</code>
<code>-x</code>	int	Returns the negation of <code>x</code>
<code>x&amp;y</code>	int	Returns the bit-wise <i>and</i> of <code>x</code> and <code>y</code>
<code>x   y</code>	int	Returns the bit-wise <i>or</i> of <code>x</code> and <code>y</code>
<code>x ^ y</code>	int	Returns the bit-wise <i>exclusive or</i> of <code>x</code> and <code>y</code>
<code>x &lt;&lt; y</code>	int	Returns a bit-wise shift left of <code>x</code> by <code>y</code> bits. Shifting left by 1 bit multiplies <code>x</code> by 2
<code>x &gt;&gt; y</code>	int	Returns a bit-wise right shift of <code>x</code> by <code>y</code> bits
<code>~ x</code>	int	Returns an integer where each bit in the <code>x</code> has been inverted. $x + x = -1$ for all <code>x</code>
<code>abs(x)</code>	int	Returns the absolute value of <code>x</code>
<code>divmod(x, y)</code>	(q,r)	Returns the quotient <code>q</code> and the remainder <code>r</code> as a tuple
<code>float(x)</code>	float	Returns the float representation of <code>x</code>
<code>hex(x)</code>	str	Returns a hexadecimal representation of <code>x</code> as a string
<code>int(x)</code>	int	Returns <code>x</code>

(continued)

**Table 8.1** (continued)

Operator	Returns	Comments
<code>oct(x)</code>	str	Return an octal representation of x as a string
<code>pow(x, y[, z])</code>	int	Returns x to the y power modulo z. If z is not specified then it returns x to the y power
<code>repr(x)</code>	str	Returns a string representation of x
<code>str(x)</code>	str	Returns a string representation of x