

# Equivalent Exposures Worksheet Solutions

<p>Fill in the blanks to provide the equivalent exposures of <b>F16 @ 1/125</b>:</p> <p>F32 @ 1/30</p> <p>F22 @ 1/60</p> <p><b>F16 @ 1/125</b></p> <p>F11 @ 1/250</p> <p>F8 @ 1/500</p> <p>F5.6 @ 1/1000</p> <p>F4 @ 1/2000</p>	<p>Fill in the blanks to provide the equivalent exposures of <b>F4 @ 1/500</b>:</p> <p>F11 @ 1/60</p> <p>F8 @ 1/125</p> <p>F5.6 @ 1/250</p> <p><b>F4 @ 1/500</b></p> <p>F2.8 @ 1/1000</p> <p>F2 @ 1/2000</p> <p>F1.4 @ 1/4000</p>	<p>Fill in the blanks to provide equivalent exposures of <b>F8 @ 1/4</b>:</p> <p>F22 @ 2 sec</p> <p>F16 @ 1 sec</p> <p>F11 @ 1/2</p> <p><b>F8 @ 1/4</b></p> <p>F5.6 @ 1/8</p> <p>F4 @ 1/15</p> <p>F2.8 @ 1/30</p>
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Fill in the blanks to provide the equivalent exposures for each exposure below.

F8 @ 1/60 $\equiv$ F5.6 @ 1/125	F8 @ 1/30 $\equiv$ F5.6 @ 1/60	F8 @ 1/15 $\equiv$ F5.6 @ 1/30
F8 @ 1/125 $\equiv$ F5.6 @ 1/250	F8 @ 1/250 $\equiv$ F5.6 @ 1/500	F8 @ 1/500 $\equiv$ F5.6 @ 1/1000
F11 @ 1/60 $\equiv$ F8 @ 1/125	F11 @ 1/60 $\equiv$ F5.6 @ 1/250	F11 @ 1/60 $\equiv$ F4 @ 1/500
F11 @ 1/60 $\equiv$ F16 @ 1/30	F11 @ 1/60 $\equiv$ F22 @ 1/15	F11 @ 1/60 $\equiv$ F32 @ 1/8
F5.6 @ 1/125 $\equiv$ F4 @ 1/250	F5.6 @ 1/60 $\equiv$ F4 @ 1/125	F5.6 @ 1/30 $\equiv$ F4 @ 1/60
F5.6 @ 1/250 $\equiv$ F4 @ 1/500	F5.6 @ 1/500 $\equiv$ F4 @ 1/1000	F5.6 @ 1/1000 $\equiv$ F4 @ 1/2000
F4 @ 1/250 $\equiv$ F5.6 @ 1/125	F4 @ 1/250 $\equiv$ F8 @ 1/60	F4 @ 1/250 $\equiv$ F11 @ 1/30
F4 @ 1/250 $\equiv$ F2.8 @ 1/500	F4 @ 1/250 $\equiv$ F2 @ 1/1000	F4 @ 1/250 $\equiv$ F1.4 @ 1/2000
F2.8 @ 1/1000 $\equiv$ F5.6 @ 1/250	F16 @ 1/60 $\equiv$ F8 @ 1/250	F8 @ 1/125 $\equiv$ F2.8 @ 1/1000
F4 @ 1/1000 $\equiv$ F8 @ 1/250	F11 @ 1/250 $\equiv$ F5.6 @ 1/1000	F5.6 @ 1/60 $\equiv$ F11 @ 1/15
F8 @ 1/4 $\equiv$ F5.6 @ 1/8	F2.8 @ 1/8 $\equiv$ F5.6 @ 1/2	F8 @ 1/2 sec $\equiv$ F11 @ 1 sec
F2.8 @ 1/2000 $\equiv$ F11 @ 1/125	F5.6 @ 1/1 sec $\equiv$ F16 @ 8 sec	F1.4 @ 1/15 $\equiv$ F2.8 @ 1/4
F22 @ 1/60 $\equiv$ F5.6 @ 1/1000	F2.8 @ 1/60 $\equiv$ F16 @ 1/2	F5.6 @ 1/30 $\equiv$ F16 @ 1/4
F2.8 @ 1/60 $\equiv$ F2 @ 1/125	F8 @ 1/15 $\equiv$ F11 @ 1/8	F1.4 @ 1/60 $\equiv$ F2.8 @ 1/15

A starting exposure is given below for 100 ISO. Fill in the blanks across to provide the equivalent exposures at 200 and 400 ISO.

Starting Exposure @ 100 ISO	200 ISO	400 ISO
F16 @ 1/125	F16 @ 1/250	F16 @ 1/500
F11 @ 1/125	F11 @ 1/250	F11 @ 1/500
F8 @ 1/125	F8 @ 1/250	F8 @ 1/500
F5.6 @ 1/125	F5.6 @ 1/250	F5.6 @ 1/500

Starting Exposure @ 100 ISO	200 ISO	400 ISO
F4 @ 1/500	F5.6 @ 1/500	F8 @ 1/500
F16 @ 1/15	F22 @ 1/15	F32 @ 1/15
F5.6 @ 1/250	F8 @ 1/250	F11 @ 1/250
F11 @ 1/60	F16 @ 1/60	F22 @ 1/60

Starting Exposure @ 100 ISO	200 ISO	400 ISO
F16 @ 1/125	F11 @ 1/500	F22 @ 1/250
F11 @ 1/125	F22 @ 1/60	F22 @ 1/125
F8 @ 1/125	F4 @ 1/1000	5.6 @ 1/1000
F5.6 @ 1/125	F4 @ 1/500	F16 @ 1/60

Starting Exposure @ 100 ISO	200 ISO	400 ISO
F2 @ 1/30	F4 @ 1/15	F8 @ 1/8
F5.6 @ 1/8	2.8 @ 1/60	F11 @ 1/8
F1.4 @ 1/1000	F8 @ 1/60	F4 @ 1/500
F2.8 @ 1/30	5.6 @ 1/15	F5.6 @ 1/30

How much more or less light reaches the sensor?

<b>Changing from</b>		<b>Changing to</b>	
F8 @ 1/125	to	F5.6 @ 1/125	<u>2X</u>
F11 @ 1/60	to	F11 @ 1/250	<u>1/4X</u>
F4 @ 1/30	to	F4 @ 1/125	<u>1/4X</u>
F16 @ 1/15	to	F8 @ 1/15	<u>4X</u>
F8 @ 1/60	to	F5.6 @ 1/125	<u>No Change</u>
F4 @ 1/30	to	F8 @ 1/8	<u>No Change</u>
F11 @ 1/500	to	F22 @ 1/1000	<u>1/8X</u>
F2 @ 1/2	to	F1.4 @ 1/8	<u>1/2X</u>
F22 @ 1/1000	to	F5.6 @ 1/250	<u>64X</u>
F22 @ 1/1000	to	F5.6 @ 1/125	<u>128X</u>
F2.8 @ 1/15	to	F5.6 @ 1/4	<u>No Change</u>
F5.6 @ 1/60	to	F2 @ 1/30	<u>16X</u>
F16 @ 1/500	to	F5.6 @ 1/1000	<u>4X</u>
F8 @ 1/15	to	F5.6 @ 1/250	<u>1/8X</u>
F22 @ 1/1000	to	F16 @ 1/15	<u>128X</u>
F2.8 @ 1/2	to	F5.6 @ 1/125	<u>1/256X</u>
F8 @ 1/1000	to	F16 @ 1/125	<u>2X</u>

How much more or less light reaches the sensor?

<b>Changing from</b>		<b>Changing to</b>	
F8 @ 1/125 @ 100 ISO	to	F5.6 @ 1/125 @ 200 ISO	<u>4X</u>
F11 @ 1/60 @ 200 ISO	to	F11 @ 1/250 400 ISO	<u>1/2X</u>
F4 @ 1/30 @ 200 ISO	to	F4 @ 1/125 @ 800 ISO	No Change
F16 @ 1/15 @ 400 ISO	to	F8 @ 1/15 @ 100 ISO	No Change
F8 @ 1/60 @ 200 ISO	to	F5.6 @ 1/125 @ 800 ISO	<u>4X</u>
F4 @ 1/30 @ 800 ISO	to	F8 @ 1/8 @ 200 ISO	<u>1/4X</u>
F11 @ 1/500 @ 200 ISO	to	F22 @ 1/1000 @ 100 ISO	<u>1/16X</u>
F2 @ 1/2 @ 1600 ISO	to	F1.4 @ 1/8 @ 800 ISO	1/4
F22 @ 1/1000 @ 400 ISO	to	F5.6 @ 1/125 @ 100 ISO	<u>32X</u>
F2.8 @ 1/15 @ 100 ISO	to	F5.6 @ 1/4 @ 800 ISO	<u>8X</u>
F5.6 @ 1/60 @ 800 ISO	to	F2 @ 1/30 @ 3200 ISO	<u>64X</u>

F16 @ 1/500 @ 200 ISO to F5.6 @ 1/1000 @ 100 ISO  
F8 @ 1/15 @ 400 ISO to F5.6 @ 1/250 @ 100 ISO

2X  
1/32X