

Planets at dusk: Jupiter, near mag. -2.4 above handle of *TEAPOT* of Sagittarius, shines in SSE to S at dusk and is the only planet prominent after nightfall. See diagram for Sept. 5-9. **Venus**, near mag. -3.9, sets in progressively darker twilight. On Sept. 1, from lat. 40° N, it sets in W nearly an hour after sunset; on Sept. 30, in WSW nearly 1½ hours after sundown. Using binoculars and diagrams on this page, let Venus lead you to nearby Mercury and Mars, and around midmonth, Spica. **The planets Mercury-Venus-Mars form a trio (all within a 5° field) Sept. 3-18**, at min. size 3.6° across Sept. 7 and 12. All diagrams showing Venus this month are drawn for lat. 34° N, where Venus appears higher and sets in a darker sky. **The objects accompanying Venus will be quite challenging to observe in twilight from northern U.S., but from all parts of the country, binoculars give best views.** Mercury on Sept. 1 glows at mag. zero, 3.2° LL of Venus. Mercury lingers 3.6° LL of Venus Sept. 6-14. On the 14th Mercury-Venus have the last of their **quintuple conjunction** in celestial longitude in 2008, with a marginally smaller least separation on Sept. 12. Then Mercury starts pulling away from Venus, appearing 4.5° below the brilliant planet on Sept. 18 and increasingly to its LR thereafter. Mercury, faded to mag. +0.7, passes 2.1° below Spica on Sept. 23, visible in midtwilight from lat. 34° N and southward, and then fades sharply in following days. **Mars**, mag. +1.7, sets ever earlier in twilight, but brighter planets are handy to help you find it. On Sept. 1, the faint red planet is 6° to Venus' upper left. On Sept. 6 Mars is 3° UL of Venus and 2.5° (min. dist.) UR of Mercury. (The Mercury-Mars pairing is the first event of a quintuple conjunction between them; their final pairing will occur in the morning sky on March 2, 2009.) On Sept. 11 Mars is just 0.3° (min. dist.) LL of Venus. This is the first of a **triple conjunction** between Venus-Mars. Their 2nd and 3rd pairings will be easier to observe, in the morning sky in April and June 2009. On Sept. 24 Mars passes 2.3° (min. dist.) UR of Spica.

By late September, **Venus and Jupiter will clearly dominate the early evening sky. Watch these two brilliant planets draw closer until their spectacular conjunction at the end of November.** On Sept. 9 they're 90° apart; on Oct. 4, 60° apart. By Nov. 1, the gap between them closes to 30°. **Point out Venus & Jupiter to your children and to students and friends, so they can enjoy following the change until they close to just 2° apart on Nov. 30.**

Dawn: Saturn emerges above horizon not far north of east by three weeks into September, to LL of Regulus; see Sept. 21, 25-27. With less than a year until the rings' edge-wise presentation, Saturn has already faded to mag. +0.9.

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Night Sky Notes on World Wide Web:

<http://www.pa.msu.edu/abrams/nightsskynotes/>

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SKY CALENDAR SEPTEMBER 2008

An aid to enjoying the changing sky

Use this scale to measure angular distances between objects on diagrams below.

